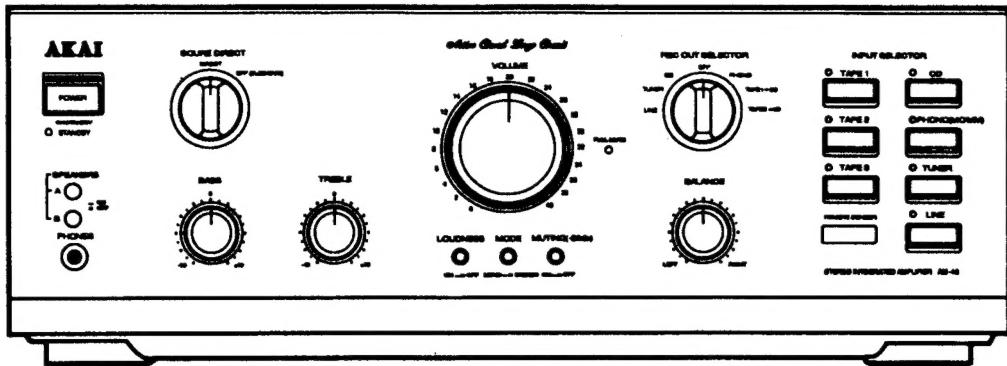


# AKAI SERVICE MANUAL



MODEL AM-49

## STEREO INTEGRATED AMPLIFIER

MODEL AM-39, 49

## SPECIFICATIONS

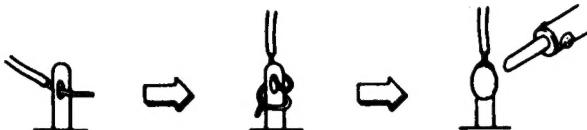
Power output	S / N ratio
AM-49 ..... 140 W + 140 W (DIN, 4 ohms at 1 kHz, 1% distortion) 80 W + 80 W (FTC, 8 ohms at 30 Hz to 20 kHz, 0.05 % distortion)	Phono (MM) ..... 85 dB (IEC-A) Phono (MC) ..... 71 dB (IEC-A) Tuner, CD, Tape ..... 101 dB (IEC-A)
AM-39 ..... 100W + 100 W (DIN, 4 ohms at 1 kHz, 1% distortion) 60 W + 60 W (FTC, 8 ohms at 30 Hz to 20 kHz, 0.05 % distortion)	Audio mute ..... - 20 dB Full mute ..... - 70 dB Channel separation ..... 65 dB (1 kHz) / 55 dB (10 kHz) Cross talk
Power band width	CD to Phono ..... 90 dB (1kHz, 500 mV Input level) CD to Tuner/Tape ..... 90 dB (1kHz, 500 mV Input level)
AM-49 ..... 5 Hz to 60 kHz / 0.1 % distortion AM-39 ..... 10 Hz to 60 kHz / 0.1% distortion	Required speaker impedance
Total harmonic distortion .. 0.005 % (1 kHz, 8 ohms)	A or B ..... 4 to 16 ohms A and B ..... 8 to 16 ohms
Frequency response ..... 5 Hz to 100 kHz (+0 dB, - 3 dB)	Power requirements ..... 220-230 V, 50 Hz for Europe except U.K. 240 V, 50 Hz for U.K.
Tone control	Power consumption
Bass ..... ± 10 dB (100 Hz) Treble ..... ± 10 dB (10 kHz)	AM-49 ..... 210 W AM-39 ..... 170 W
Input sensitivity/Impedance	Dimensions ..... 425 (W) x 156 (H) x 370 (D) mm
Phono (MM) ..... 2.0 mV / 47 kohms Phono (MC) ..... 200 µV / 100 ohms Tuner, CD, Tape. ..... 150 mV / 47 kohms	Weight
Maximum input level	AM-49 ..... 10.9 kg AM-39 ..... 10.2 kg
Phono (MM) ..... 150 mV Tuner, CD, Tape. ..... 9 V (at tone control flat)	Standard accessory
Damping factor ..... 48 (1 kHz, 8 ohms)	Remote control unit ..... 1
Residual noise ..... 0.1 mV (IEC-A)	Batteries for remote control ..... 2
	Operator's manual ..... 1

\* For improvement purposes, specifications and design are subject to change without notice.

# ★SAEETY INSTRUCTIONS

## PRECAUTIONS DURING SERVICING

1. Parts indentified by the  $\Delta$  (\*) symbol are critical for safety. Replace them only with the parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.  
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
  - 1) Wires covered with PVC tubing
  - 2) Double insulated wires
  - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
  - 1) Insulation Tape
  - 2) PVC tubing
  - 3) Spacers (Insulating Barriers)
  - 4) Insulation sheets for transistors
  - 5) Plastic screws for fixing micro switch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.



6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).

7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

## SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.

The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphonejacks, signal-input/output connectors, etc.) and the earth ground through a resistor of 1500 ohms paralleled with a 0.15  $\mu$ F capacitor, under the unit's normal working conditions. The leakage-current should be less than 0.5 mA rms AC.

The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M ohms.

## MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.



Please leave them at an appropriate depot.

# ★INFORMATION

## SYMBOLS FOR PRIMARY DESTINATION

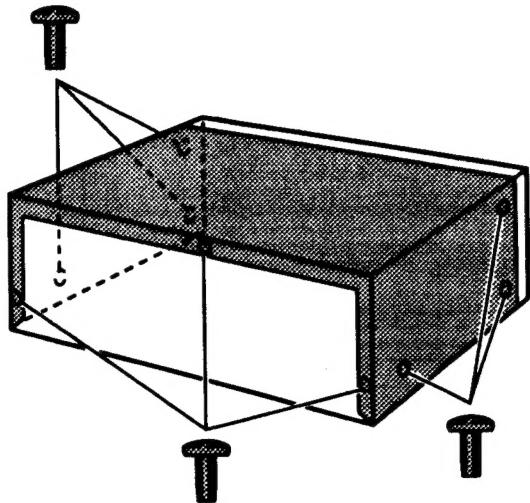
Alphabet indicates the destination of the units as listed below.

Symbols	Principal Destinations
[A]	U.S.A
[B]	U.K.
[C]	Canada
[E]	Europe (except UK)
[J]	Japan
[S]	Australia
[V]	Germany
[U]	Universal Area
[Y*]	Custom version

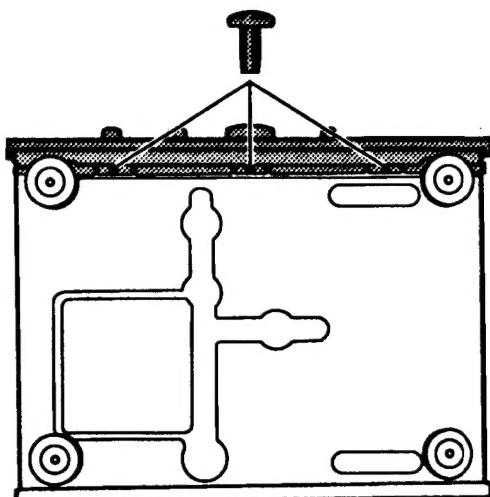
# I. DISASSEMBLY

In case of trouble, etc., necessitating dismantling, please dismantle in the order shown in the illustrations.  
Reassemble in the reverse order.

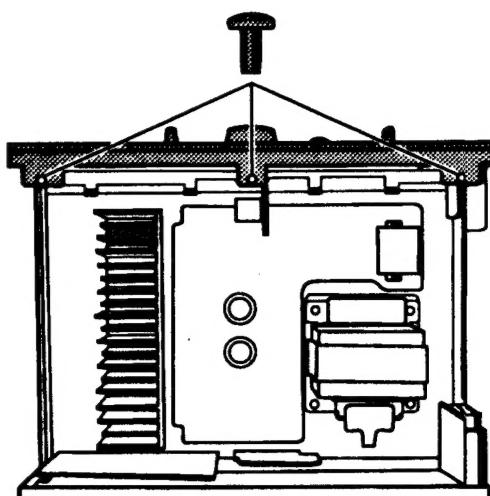
## 1. Removal of UPPER COVER



## 2. Removal of FRONT PANEL



Remove the six knobs by pulling them out.



## II. PRINCIPAL PARTS LOCATION

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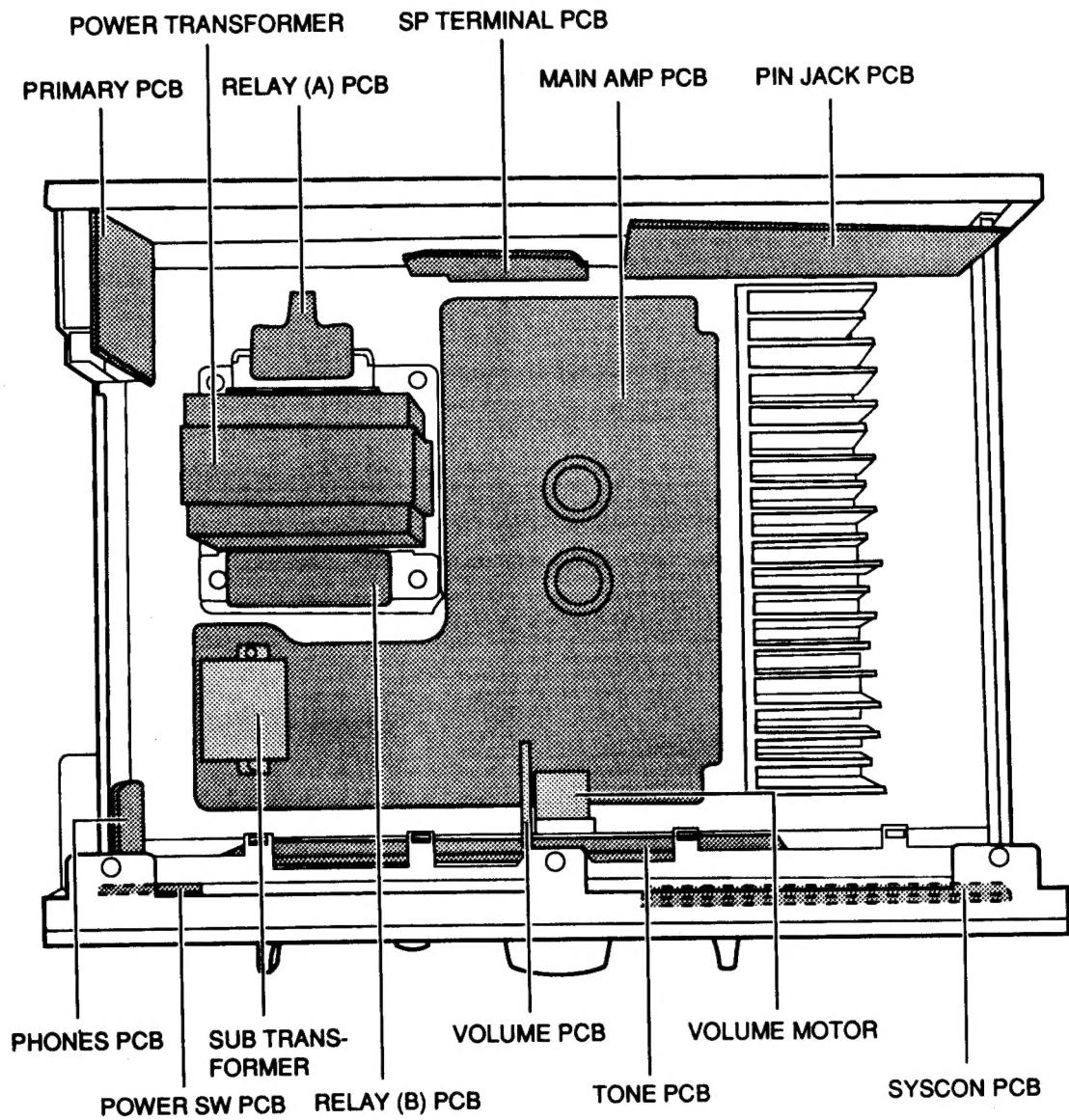
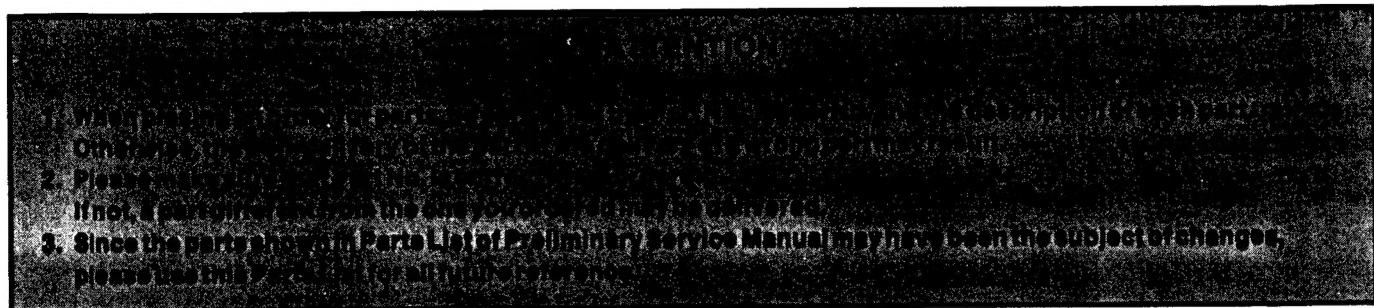


Fig.2-1

### III. PARTS LIST



#### HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

#### 2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

#### 6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMV V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMV V 223M 250DC [J]
C1C	EC-338397	C MMV V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] : AAL (U.S.A)      [S] : SAA (Australia)  
[B] : BEAB (England)    [U] : U/T (Universal Area)  
[C] : CSA (Canada)  
[E] : CEE (Europe)      [V] : VDE (Germany)  
[J] : JPN (Japan)        [Y] : Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

#### WARNING

△ (\*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.

#### AVERTISSEMENT

△ (\*) INDIQUE LES COMPOSANTS CRITIQUES DE SECURITE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL, NE remplacer que des pieces recommandees par le fabricant.

## 1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref. No.	Part No.	Description
1	AX-415040M	REMOCON RC-S49 [AM-39]
2	AX-415115M	REMOCON RC-S59 [AM-49]
3	*BT-415038M	TRANS POW A1030S-BS [B]
4	*BT-415037M	TRANS POW A1030S-EV [E]
5	*BT-415111M	TRANS POW A2075-BS [AM-39][T901]
6	*BT-415110M	TRANS POW A2075-EV [AM-39][T901]
7	*BT-415114M	TRANS POW A2076-BS [AM-49][T901]
8	*BT-415112M	TRANS POW A2076-EV [AM-49][T901]
9	*EC-368118	C DBL LAYER EECS5R5H 224 5.5DC
10	EC-364978	C EC V CUT SME 102M 16.0DC
11	EC-373373	C EC V CUT 822M 56.0DC [AM-49]
12	EC-390066J	C EC V S10 682M 50.0DC [AM-39]
13	ED-403436J	D LED SLR-33VCF03 RED T05
14	ED-415085J	D LED SLR-33VC3F RED
15	ED-383034J	D LED SLR-54PC3F LM GREEN
16	ED-400680J	D LED SLR33MCF3 GREEN T05
17	ED-403987J	D LED SLR33MC3F GREEN
18	ED-301911	D SILICON H DS448
19	ED-307572	D SILICON H 1SS131
20	ED-624903	D SILICON H 1S2473
21	*ED-384278J	D SILICON RBV602 200/6.0A
22	*ED-511907	D SILICON 1N4002 100/1.0A
23	*ED-319176	D ZENER H HZ12 A3
24	*ED-343421	D ZENER H HZ16-2L
25	ED-330219	D ZENER H HZ20-2L
26	*ED-346529	D ZENER H HZ6C2L
27	*EF-415060J	FUSE S504 T 250V 630MA
28	*EF-415061J	FUSE S506 T 250V 2.50A [AM-39]
29	*EF-415062J	FUSE S506 T 250V 3.15A [AM-49]
30	EI-416800J	IC LC66404A-4B67 A2075-1
31	EI-403530J	IC LC7822N
32	*EI-393323J	IC M5218AL-771
33	EI-393326J	IC M5218AP-721
34	EI-382875J	OSC CE CST4.00MGW 4MHZ
35	*EJ-415050J	SOCKET OUT M1882 3P [E]
36	*EQ-415055J	RELAY POW VS-6MB 1NO 6V
37	EQ-403529J	RELAY POW 12S MBU524UL3 2NO12V
38	EQ-400957J	RELAY SIG RY12W-OH-K 2TR 12V
39	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G
40	*ER-344161	R FUSE H S10 ERD2FC 1/4W 82R0G
41	ES-415119J	SW PUSH SPEC21 2THROW * [AM-39]
42	ES-415120J	SW PUSH SPEC31 3THROW * [AM-49]
43	ES-415087J	SW PUSH SPUL21 2THROW N
44	ES-415126J	SW ROTARY SRBV17 01-07N
45	ES-415099J	SW ROTARY SRBV22 02-02N
46	ES-415123J	SW SLIDE SSSU04 2-04-02S
47	ES-415046J	SW TACT SOR-132HS T05 [AM-49]
48	ET-403432J	DETECTOR SPS-420-1
49	ET-369248	TR DTA114YS
50	ET-353897	TR DTC114ES
51	ET-354365	TR DTC114YS
52	ET-322353	TR FET 2SK117 Y
53	ET-360749	TR FET 2SK170 BL
54	*ET-415051J	TR 2SA1186 P,Y LF118 [AM-39]
55	ET-368048	TR 2SA1208 S [AM-49]
56	*ET-345626	TR 2SA1248 S,T

Ref. No.	Part No.	Description
57	*ET-415052J	TR 2SA1303 P,Y LF118 [AM-49]
58	ET-353899	TR 2SA1317 S,T,U
59	*ET-352726	TR 2SA1392 T,U
60	ET-305463	TR 2SA970 GR,BL [AM-39]
61	ET-307195	TR 2SC2240 GR,BL
62	*ET-415053J	TR 2SC2837 P,Y LF118 [AM-39]
63	ET-368047	TR 2SC2910 S [AM-49]
64	*ET-345625	TR 2SC3116 S,T
65	*ET-415056J	TR 2SC3284 P,Y LF118 [AM-49]
66	ET-397160J	TR 2SC3330 R,S,T,U,V
67	*ET-378524J	TR 2SC3383 S,T,U
68	ET-394735J	TR 2SC3792 T05
69	*ET-376880	TR 2SD1266 P

## 2. P.C BOARD BLOCK

Ref. No.	Part No.	Description
1-A	BA-A1030T020F	ML PC (#) MAIN BLK AM-39 (E)/ML
1-B	BA-A1030T020G	ML PC (#) MAIN BLK AM-39 (B)/ML
1-C	BA-A1030T020H	ML PC (#) MAIN BLK AM-49 (E)/ML
1-D	BA-A1030T020J	ML PC (#) MAIN BLK AM-49 (B)/ML
2-A	BA-A2075T030A	ML PC (#) PRE-SYSBLK AM-39 (E)/ML
2-B	BA-A2075T030B	ML PC (#) PRE-SYSBLK AM-39 (B)/ML
2-C	BA-A2075T030C	ML PC (#) PRE-SYSBLK AM-49 (E)/ML
2-D	BA-A2075T030D	ML PC (#) PRE-SYSBLK AM-49 (B)/ML

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARDS.

- MAIN AMP P.C BOARD
- PRIMARY P.C BOARD
- SP TERMINAL P.C BOARD
- PHONES P.C BOARD

PC (#) PRE-SYS BLK CONSISTS OF FOLLOWING P.C BOARDS.

- PIN JACK P.C BOARD
- TONE P.C BOARD
- VOLUME P.C BOARD
- SYSCON P.C BOARD
- POWER SW P.C BOARD

## 3. MAIN AMP P.C BOARD

Ref. No.	Part No.	Description
C150-A	EC-390066J	C EC V S10 682M 50.0DC [AM-39]
C150-B	EC-373373	C EC V CUT 822M 56.0DC [AM-49]
C151-A	EC-390066J	C EC V S10 682M 50.0DC [AM-39]
C151-B	EC-373373	C EC V CUT 822M 56.0DC [AM-49]
C159	EC-364978	C EC V CUT SME 102M 16.0DC
D103	ED-301911	D SILICON H DS448
D104	ED-301911	D SILICON H DS448
D105	*ED-301911	D SILICON H DS448
D106	ED-307572	D SILICON H 1SS131
D107	ED-307572	D SILICON H 1SS131
D108	ED-624903	D SILICON H 1S2473
D109	ED-307572	D SILICON H 1SS131
D110	ED-307572	D SILICON H 1SS131
D111	ED-624903	D SILICON H 1S2473
D112	ED-330219	D ZENER H HZ20-2L
D150	*ED-384278J	D SILICON RBV602 200/6.0A
D151	*ED-511907	D SILICON 1N4002 100/1.0A
D152	*ED-511907	D SILICON 1N4002 100/1.0A
D153	*ED-511907	D SILICON 1N4002 100/1.0A
D154	*ED-511907	D SILICON 1N4002 100/1.0A
D155	ED-301911	D SILICON H DS448
D156	ED-301911	D SILICON H DS448
D157	ED-301911	D SILICON H DS448

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
D158	ED-301911	D SILICON H DS448	TR111	*ET-378524J	TR 2SC3383 S,T,U
D159	*ED-343421	D ZENER H HZ16-2L	TR112	*ET-352726	TR 2SA1392 T,U
D160	*ED-343421	D ZENER H HZ16-2L	TR113	*ET-345625	TR 2SC3116 S,T
D161	*ED-511907	D SILICON 1N4002 100/1.0A	TR114	*ET-345626	TR 2SA1248 S,T
D162	*ED-511907	D SILICON 1N4002 100/1.0A	TR115-A	*ET-415053J	TR 2SC2837 P,Y LF118 [AM-39]
D163	*ED-511907	D SILICON 1N4002 100/1.0A	TR115-B	*ET-415056J	TR 2SC3284 P,Y LF118 [AM-49]
D164	*ED-511907	D SILICON 1N4002 100/1.0A	TR116-A	*ET-415051J	TR 2SA1186 P,Y LF118 [AM-39]
D165	ED-301911	D SILICON H DS448	TR116-B	*ET-415052J	TR 2SA1303 P,Y LF118 [AM-49]
D166	ED-301911	D SILICON H DS448	TR117	ET-305463	TR 2SA970 GR,BL
D167	*ED-346529	D ZENER H HZ6C2L	TR118	ET-397160J	TR 2SC3330 R,S,T,U,V
D170	ED-383034J	D LED SLR-54PC3F L,M GREEN	TR119	ET-353899	TR 2SA1317 S,U
D203	ED-301911	D SILICON H DS448	TR120	ET-397160J	TR 2SC3330 R,S,T,U,V
D204	ED-301911	D SILICON H DS448	TR121	ET-397160J	TR 2SC3330 R,S,T,U,V
D205	*ED-301911	D SILICON H DS448	TR122	ET-397160J	TR 2SC3330 R,S,T,U,V
D206	ED-307572	D SILICON H 1SS131	TR123	ET-397160J	TR 2SC3330 R,S,T,U,V
D207	ED-307572	D SILICON H 1SS131	TR150	ET-352726	TR 2SA1392 T,U
D270	ED-383034J	D LED SLR-54PC3F L,M GREEN	TR151	*ET-376880	TR 2SD1266 P
FR101	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G	TR152	*ET-378524J	TR 2SC3383 S,T,U
FR102	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G	TR153	*ET-345626	TR 2SA1248 S,T
FR201	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G	TR154	ET-352726	TR 2SA1392 T,U
FR202	*ER-341493	R FUSE H S10 ERD2FC 1/4W 1001G	TR155	*ET-345625	TR 2SC3116 S,T
IC101	*EI-393323J	IC M5218AL-771	TR156	ET-397160J	TR 2SC3330 R,S,T,U,V
L101	EO-403613J	COIL FIX 2 202AK-018A 2R2K	TR157	*ET-378524J	TR 2SC3383 S,T,U
L201	EO-403613J	COIL FIX 2 202AK-018A 2R2K	TR158	*ET-345625	TR 2SC3116 S,T
R115	*ER-382613J	R CB H S10FLR RDS 1/4W 331J	TR201	ET-322353	TR FET 2SK117 Y
R118	*ER-382613J	R CB H S10FLR RDS 1/4W 331J	TR202	ET-307195	TR 2SC2240 GR,BL
R120	*ER-382613J	R CB H S10FLR RDS 1/4W 331J	TR203	ET-307195	TR 2SC2240 GR,BL
R122	*ER-378514J	R OMF H S12 FS 1W 8R2J	TR204	*ET-307195	TR 2SC2240 GR,BL
R123	*ER-378514J	R OMF H S12 FS 1W 8R2J	TR205-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
R125	*ER-368284	R OMF H S12 FS 1W 271J	TR205-B	*ET-368048	TR 2SA1208 S [AM-49]
R126	*ER-383007J	R OMF H S12 FS 1W 1R0J	TR206-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
R127	*ER-383007J	R OMF H S12 FS 1W 1R0J	TR206-B	*ET-368048	TR 2SA1208 S [AM-49]
R128	*ER-324480	R CB H S10 FS RDS 1/4W 470J	TR207-A	*ET-305463	TR 2SA970 GR,BL [AM-39]
R129	*ER-324480	R CB H S10 FS RDS 1/4W 470J	TR207-B	*ET-368048	TR 2SA1208 S [AM-49]
R130	*ER-368226	R CT P R33+R33 5W	TR208-A	ET-305463	TR 2SA970 GR,BL [AM-39]
R131	*ER-333119	R OMF H S20 FS 2W 560J	TR208-B	ET-368048	TR 2SA1208 S [AM-49]
R132	*ER-411836J	R OMF H S15 FS 2W 1R0J	TR209-A	ET-307195	TR 2SC2240 GR,BL [AM-39]
R166	*ER-378833J	R CB H S10FLR RDS 1/4W 220J	TR209-B	ET-368047	TR 2SC2910 S [AM-49]
R169	*ER-378833J	R CB H S10FLR RDS 1/4W 220J	TR210	*ET-378524J	TR 2SC3383 S,T,U [AM-39]
R175	*ER-328069	R CB H S10 FS RDS 1/4W 2R7J	TR211	*ET-378524J	TR 2SC3383 S,T,U [AM-39]
R182	*ER-328069	R CB H S10 FS RDS 1/4W 2R7J	TR212	*ET-352726	TR 2SA1392 T,U [AM-39]
R215	*ER-382613J	R CB H S10FLR RDS 1/4W 331J	TR213	*ET-345625	TR 2SC3116 S,T [AM-39]
R218	*ER-382613J	R CB H S10FLR RDS 1/4W 331J	TR214	*ET-345626	TR 2SA1248 S,T [AM-39]
R220	*ER-382613J	R CB H S10FLR RDS 1/4W 331J	TR215-A	*ET-415053J	TR 2SC2837 P,Y LF118 [AM-39]
R222	*ER-378514J	R OMF H S12 FS 1W 8R2J	TR215-B	*ET-415056J	TR 2SC3284 P,Y LF118 [AM-49]
R223	*ER-378514J	R OMF H S12 FS 1W 8R2J	TR216-A	*ET-415051J	TR 2SA1186 P,Y LF118 [AM-39]
R225	*ER-368284	R OMF H S12 FS 1W 271J	TR216-B	*ET-415052J	TR 2SA1303 P,Y LF118 [AM-49]
R226	*ER-383007J	R OMF H S12 FS 1W 1R0J	TR217	ET-305463	TR 2SA970 GR,BL
R227	*ER-383007J	R OMF H S12 FS 1W 1R0J	F2	*EF-415060J	FUSE S504 T 250V 630MA
R230	*ER-368226	R CT P R33+R33 5W	F3	*EF-415060J	FUSE S504 T 250V 630MA
R231	*ER-333119	R OMF H S20 FS 2W 560J			
R232	*ER-411836J	R OMF H S15 FS 2W 1R0J			
RL101	EQ-403529J1	RELAY POW 12S MBU524UL3 2NO12V			
T101-A	*BT-415037M	TRANS POW A1030S-EV			
T101-B	*BT-415038M	TRANS POW A1030S-BS			
		[B]			
TR101	ET-322353	TR FET 2SK117 Y			
TR102	ET-307195	TR 2SC2240 GR,BL			
TR103	ET-307195	TR 2SC2240 GR,BL			
TR104	*ET-307195	TR 2SC2240 GR,BL			
TR105-A	ET-305463	TR 2SA970 GR,BL			
		[AM-39]			
TR105-B	ET-368048	TR 2SA1208 S			
		[AM-49]			
TR106-A	*ET-305463	TR 2SA970 GR,BL			
		[AM-39]			
TR106-B	*ET-368048	TR 2SA1208 S			
		[AM-49]			
TR107-A	*ET-305463	TR 2SA970 GR,BL			
		[AM-39]			
TR107-B	*ET-368048	TR 2SA1208 S			
		[AM-49]			
TR108-A	ET-305463	TR 2SA970 GR,BL			
		[AM-39]			
TR108-B	ET-368048	TR 2SA1208 S			
		[AM-49]			
TR109-A	ET-307195	TR 2SC2240 GR,BL			
		[AM-39]			
TR109-B	ET-368047	TR 2SC2910 S			
		[AM-49]			
TR110	*ET-378524J	TR 2SC3383 S,T,U			

#### 4. PRIMARY P.C BOARD

Ref. No.	Part No.	Description
C301	*EC-338496	C CE V DE7100 FZ 472P 400AC
D301	ED-624903	D SILICON H 1S2473
J302	*EJ-415050J	SOCKET OUT M1882 3P [E]
L301	*EO-403613J	COIL FIX 2 202AK-018A 2R2K
L302	*EO-403613J	COIL FIX 2 202AK-018A 2R2K
RL301	*EQ-415055J	RELAY POW VS-6MB 1NO 6V
F1-A	*EF-415061J	FUSE S506 T 250V 2.50A [AM-39]
F1-B	*EF-415062J	FUSE S506 T 250V 3.15A [AM-49]

#### 5. SP TERMINAL P.C BOARD

Ref. No.	Part No.	Description
TM401	EJ-342935	TERMINAL W/SCREW YKD31-0132P8P

#### 6. PHONES P.C BOARD

Ref. No.	Part No.	Description
J501	EJ-391132J	PHONE J 3P YKB24-5162 GP 6.3
R501	*ER-333108	R OMF H S20 FS 2W 471J
R551	*ER-333108	R OMF H S20 FS 2W 471J
SW501	ES-415087J	SW PUSH SPUL21 2THROW N

#### 7. PIN JACK P.C BOARD

Ref. No.	Part No.	Description
D1	ED-301911	D SILICON H DS448
D2	ED-301911	D SILICON H DS448
FR41	*ER-344161	R FUSE H S10 ERD2FC 1/4W 82R0G
FR42	*ER-344161	R FUSE H S10 ERD2FC 1/4W 82R0G
IC1	EI-39326J	IC M5218AP-721
IC2	EI-403530J	IC LC7822N
IC3	EI-403530J	IC LC7822N
J1	EJ-384270J	PIN J T6227-AACB 2P
J2	EJ-368244	PIN J T6087 6P
J3	EJ-382362J	PIN J T6027-AABB 4P
J4	EJ-382362J	PIN J T6027-AABB 4P
J5	EJ-382362J	PIN J T6027-AABB 4P [AM-49]
SW1	ES-415123J	SW SLIDE SSSU04 2-04-02S
TR1	ET-360749	TR FET 2SK170 BL
TR2	ET-360749	TR FET 2SK170 BL
TR3	ET-394735J	TR 2SC3792 T05
TR4	ET-394735J	TR 2SC3792 T05
TR5	ET-394735J	TR 2SC3792 T05
TR6	ET-394735J	TR 2SC3792 T05
TR7	ET-394735J	TR 2SC3792 T05
TR51	ET-360749	TR FET 2SK170 BL
TR52	ET-360749	TR FET 2SK170 BL
TR53	ET-394735J	TR 2SC3792 T05
TR54	ET-394735J	TR 2SC3792 T05
TR55	ET-394735J	TR 2SC3792 T05
TR56	ET-394735J	TR 2SC3792 T05
TR57	ET-394735J	TR 2SC3792 T05

#### 8. TONE P.C BOARD

Ref. No.	Part No.	Description
D101	*ED-319176	D ZENER H HZ12 A3
D102	ED-624903	D SILICON H 1S2473
IC101	EI-39323J	IC M5218AL-771
IC102	EI-39323J	IC M5218AL-771
RL101	EQ-400957J	RELAY SIG RY12W-OH-K 2TR 12V
SW101-A	ES-415119J	SW PUSH SPEC21 2THROW * [AM-39]
SW101-B	ES-415120J	SW PUSH SPEC31 3THROW * [AM-49]
SW102	ES-415099J	SW ROTARY SRBV22 02-02N
SW103	ES-415126J	SW ROTARY SRBV17 01-07N
TR101	ET-397160J	TR 2SC3330 R,S,T,U,V
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
VR101	EV-401270J	VR ROTARY RK16312 B103X2
VR102	EV-401270J	VR ROTARY RK16312 B103X2
VR103	EV-403534J	VR ROTARY RK1631220 SPL W104

#### 9. VOLUME P.C BOARD

Ref. No.	Part No.	Description
D201	ED-301911	D SILICON H DS448
TR201	ET-353899	TR 2SA1317 S,T,U
TR202	ET-353899	TR 2SA1317 S,T,U
TR203	ET-397160J	TR 2SC3330 R,S,T,U,V
TR204	ET-397160J	TR 2SC3330 R,S,T,U,V
VR201	EV-415032M	VR SPL EUWM HD003 B15 B104X2

#### 10. SYSCON P.C BOARD

Ref. No.	Part No.	Description
C802	*EC-368118	C DBL LAYER EECSS5R5H 224 5.5DC
D801	ED-301911	D SILICON H DS448
D802	ED-301911	D SILICON H DS448
D803	ED-624903	D SILICON H 1S2473
D804	ED-403436J	D LED SLR-33VCF03 RED T05
D805	ED-400680J	D LED SLR33MCF3 GREEN T05
D806	ED-400680J	D LED SLR33MCF3 GREEN T05
D807	ED-400680J	D LED SLR33MCF3 GREEN T05
D808	ED-400680J	D LED SLR33MCF3 GREEN T05
D809	ED-400680J	D LED SLR33MCF3 GREEN T05
D810	ED-400680J	D LED SLR33MCF3 GREEN T05
D811	ED-400680J	D LED SLR33MCF3 GREEN T05
IC801	EI-416800J	[AM-49] IC LC66404A-4B67 A2075-1
PH801	ET-403432J	DETECTOR SPS-420-1
TR801	ET-353897	TR DTC114ES
TR802	ET-354365	TR DTC114YS
TR803	ET-369248	TR DTA114YS
TR804	ET-397160J	TR 2SC3330 R,S,T,U,V
TS801	ES-415046J	SW TACT SOR-132HS T05 [AM-49]
TS802	ES-415046J	SW TACT SOR-132HS T05
TS803	ES-415046J	SW TACT SOR-132HS T05
TS804	ES-415046J	SW TACT SOR-132HS T05
TS805	ES-415046J	SW TACT SOR-132HS T05
TS806	ES-415046J	SW TACT SOR-132HS T05
TS807	ES-415046J	SW TACT SOR-132HS T05
X801	EI-382875J	OSC CE CST4.00MGW 4MHZ

#### 11. POWER SW P.C BOARD

Ref. No.	Part No.	Description
D851	ED-415085J	D LED SLR-33VC3F RED
D852	ED-403987J	D LED SLR33MC3F GREEN
D853	ED-403987J	D LED SLR33MC3F GREEN
TS851	ES-415046J	SW TACT SOR-132HS T05

# AKAI

MODEL **AM-39**

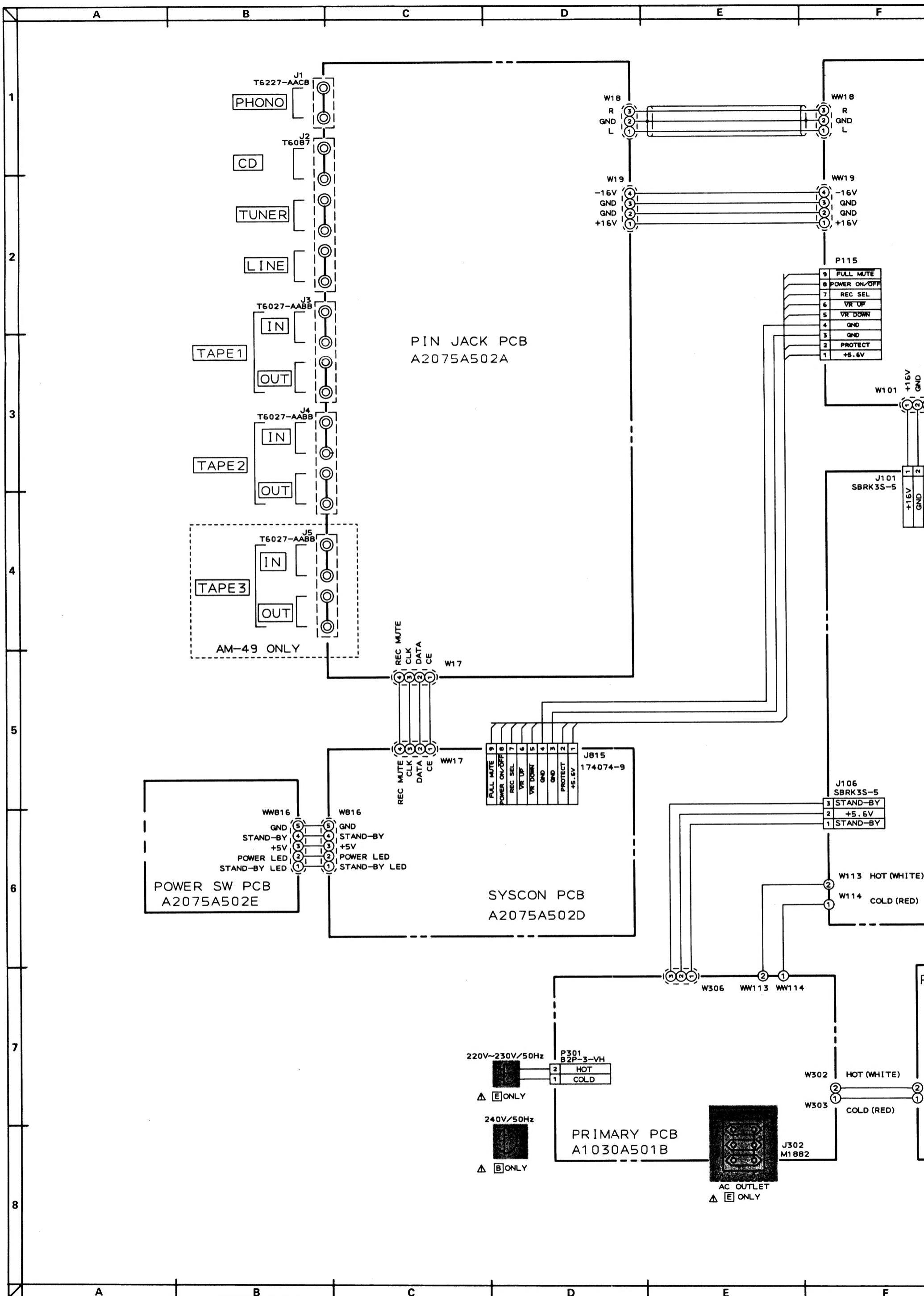
MODEL **AM-49**

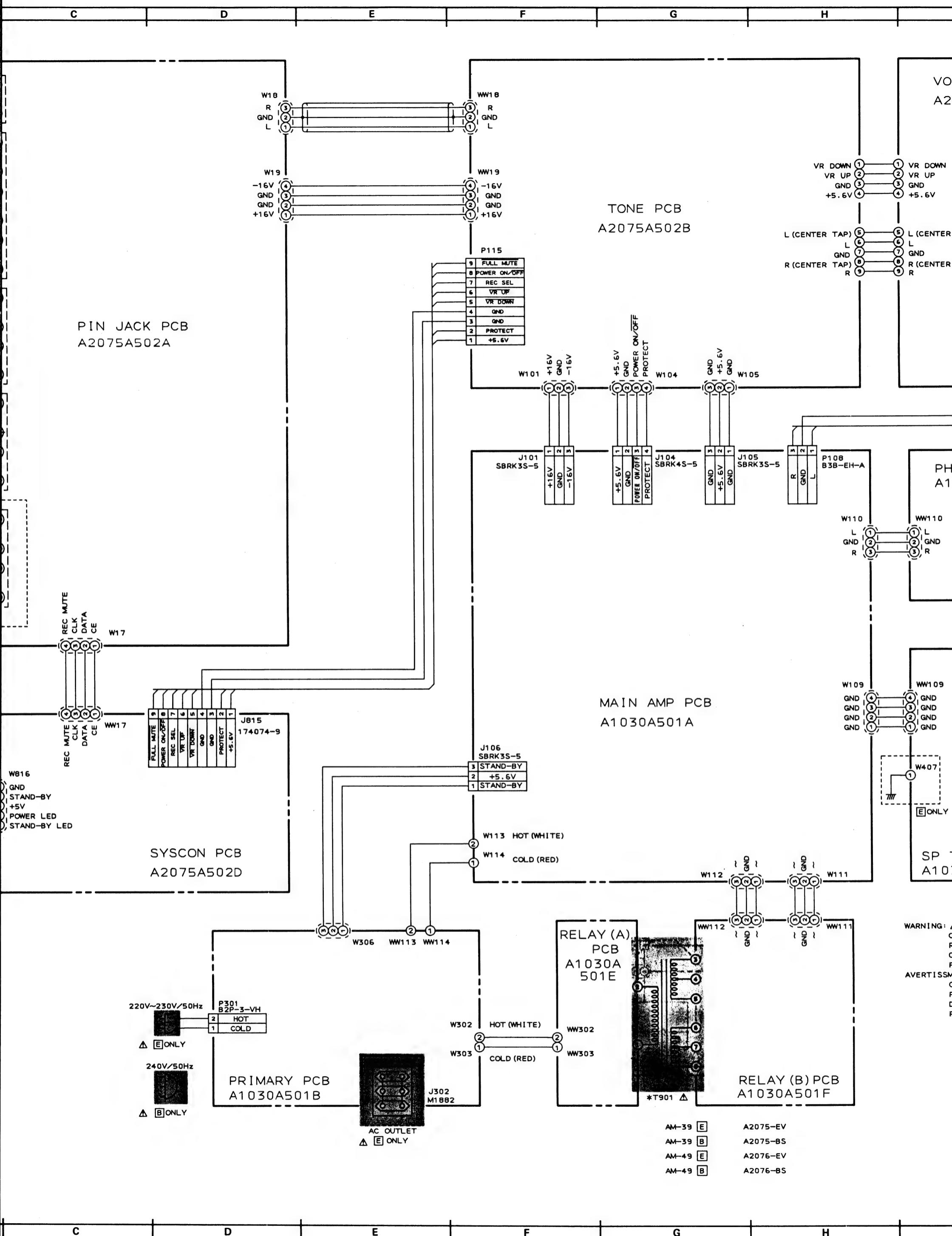
## **SCHEMATIC DIAGRAMS AND PC BOARDS**

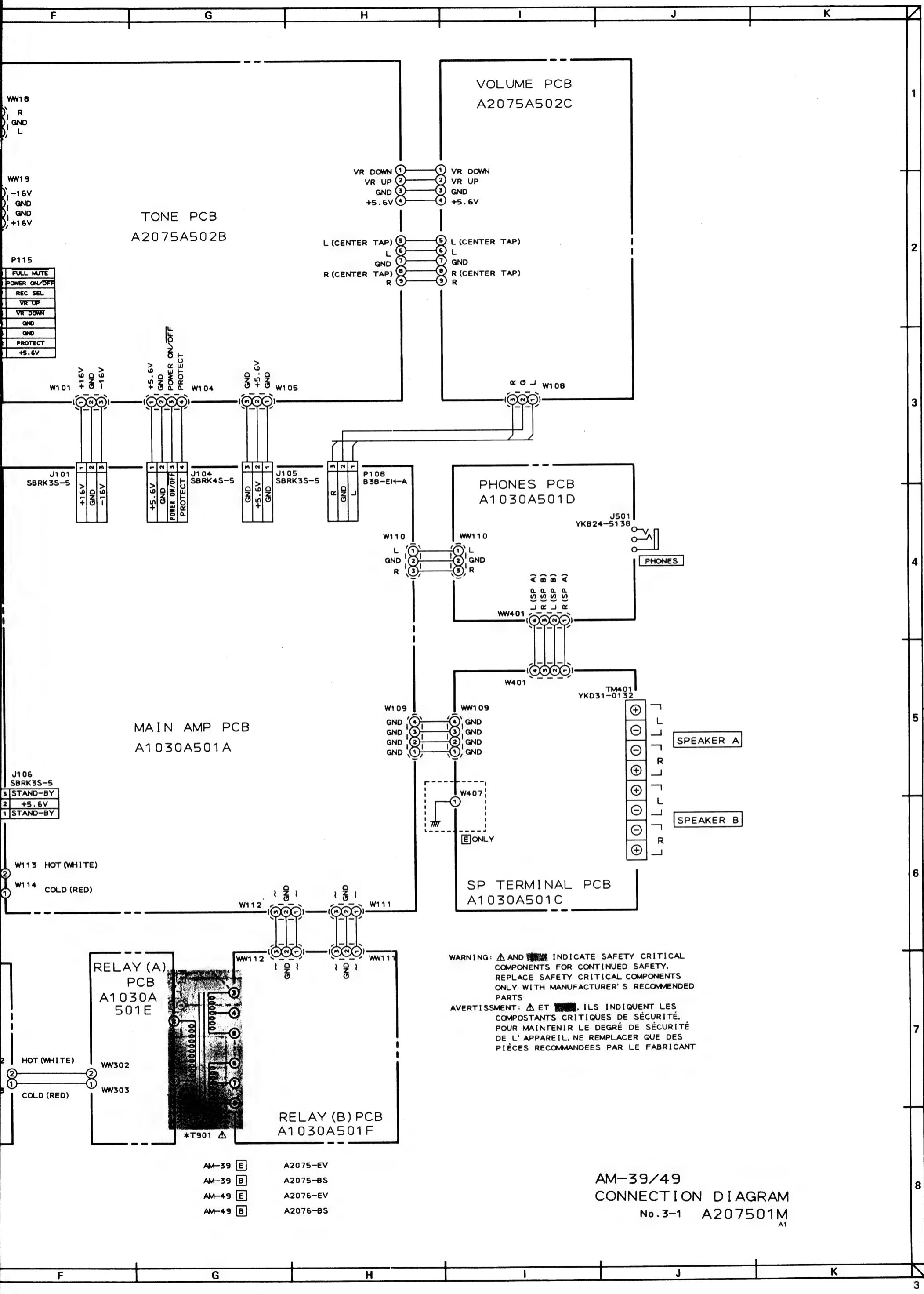
### **TABLE OF CONTENTS**

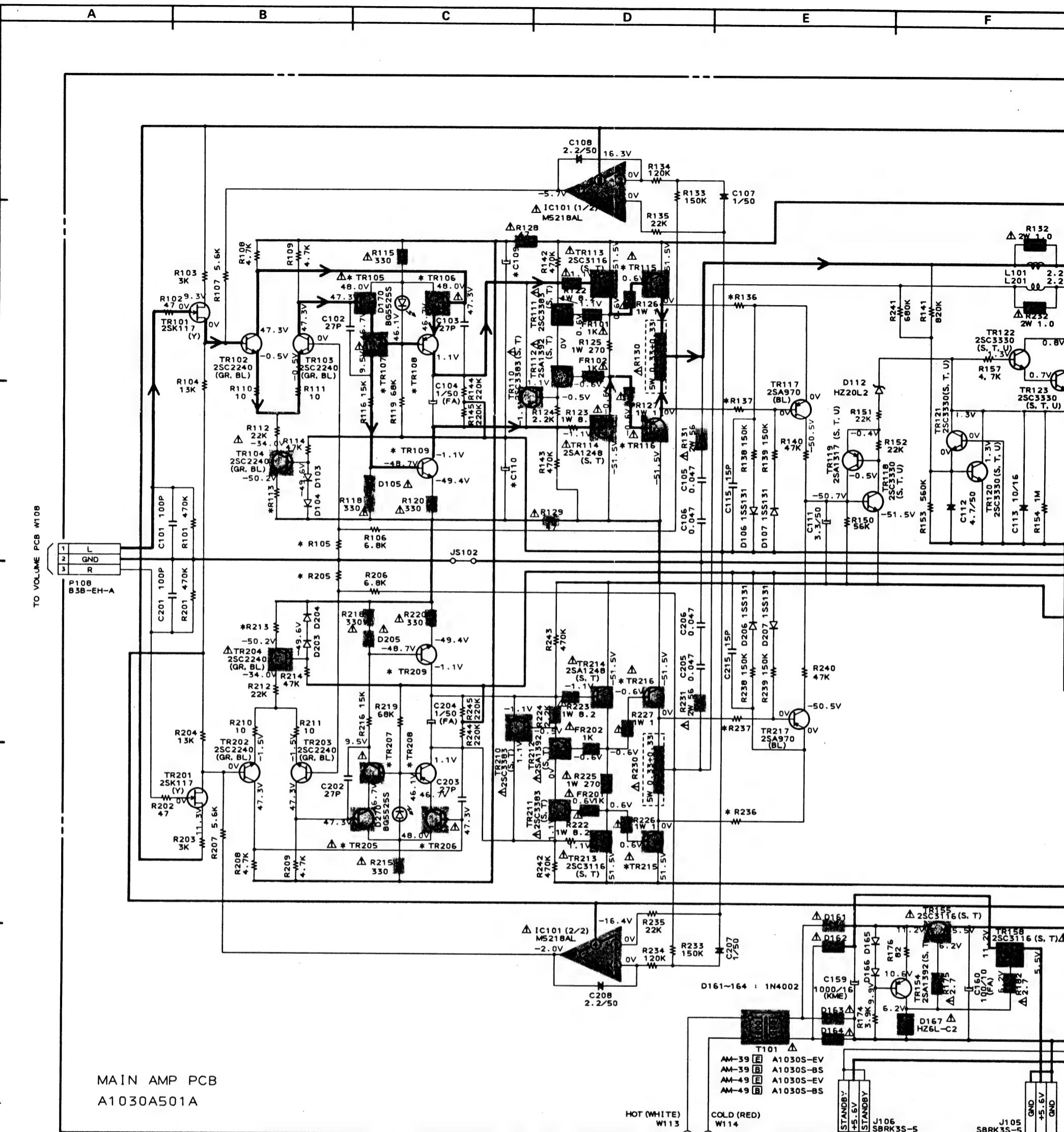
1. CONNECTION DIAGRAM .....	3
2. MAIN AMP & POWER SCHEMATIC DIAGRAM .....	4
3. MAIN AMP AND OTHER PC BOARDS .....	5
4. PRE AMP & SYSCON SCHEMATIC DIAGRAM .....	6
5. TONE AND OTHER PC BOARDS .....	7
6. BLOCK DIAGRAM .....	8
8. INFORMATION OF ICs .....	9

Use these schematic diagrams and PC boards together with the provided service manual.









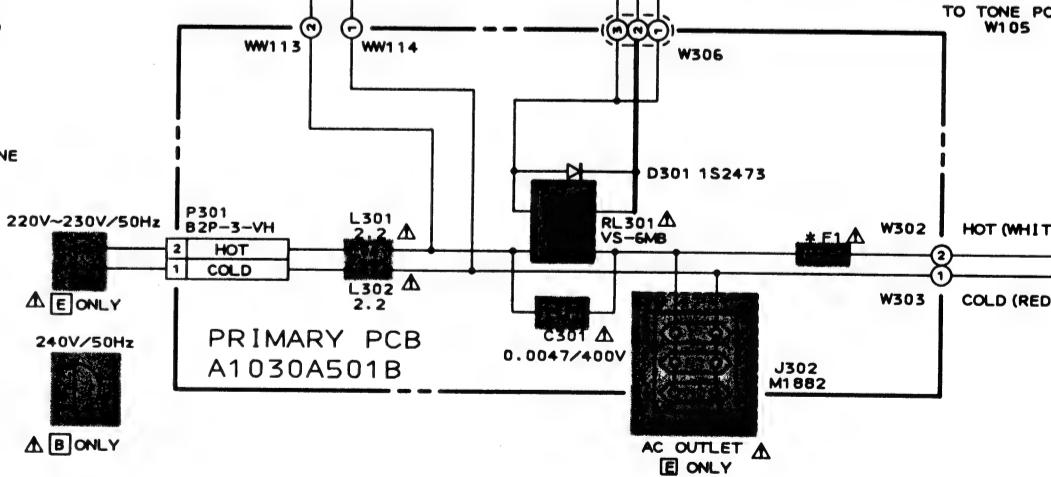
\*DEPENDED ON MODEL. No.

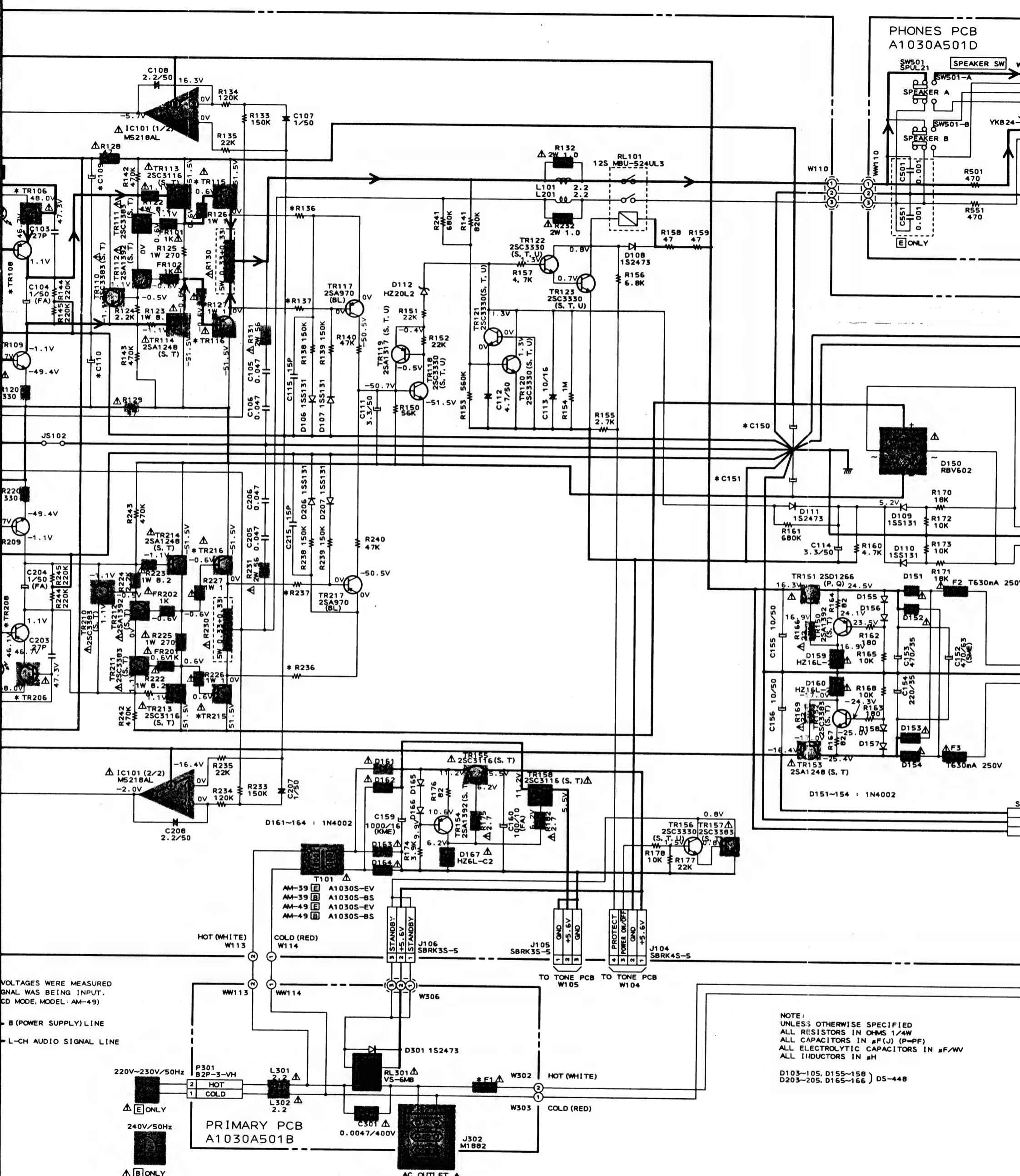
	AM-39	AM-49
C109, 110	10/50	10/63
C150, 151	6800/50	8200/56
R105, 205	47	39
R136, 236, 137, 237	4.7K	56K
TR105, 205, 106, 206	2SA970 (BL)	2SA1208 (S)
TR107, 207, 108, 208	2SA970 (BL)	2SA1208 (S)
TR109, 209	2SC2240 (GR, BL)	2SC2910 (S)
TR115, 215	2SC2837 (P, Y)	2SC3284 (P, Y)
TR116, 216	2SA1186 (P, Y)	2SA1303 (P, Y)
R113, 213	470	390
F1	T2.5A 250V	T3.15A 250V

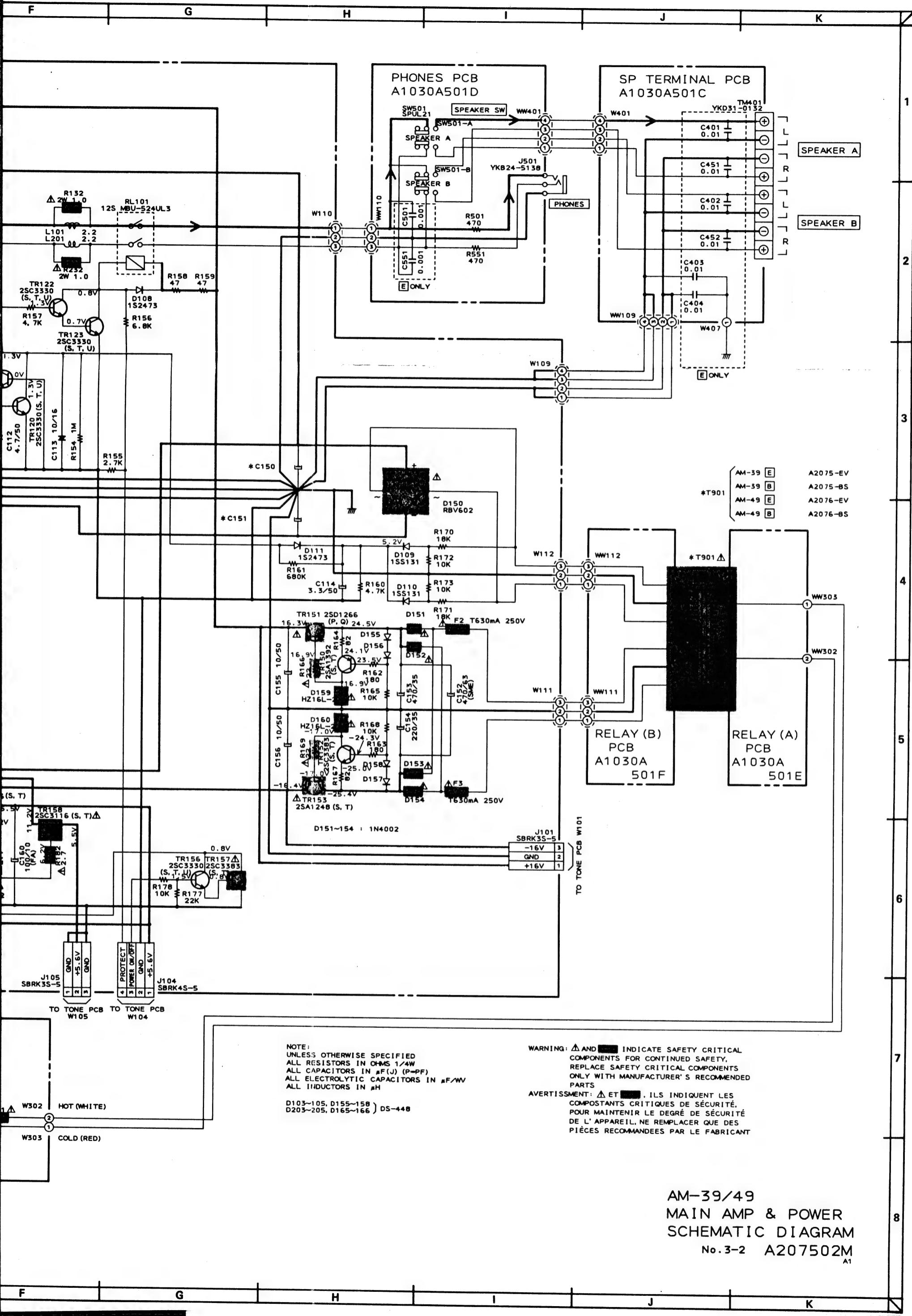
INDICATED VOLTAGES WERE MEASURED  
WHEN NO SIGNAL WAS BEING INPUT.  
(FUNCTION: CD MODE, MODEL: AM-49)

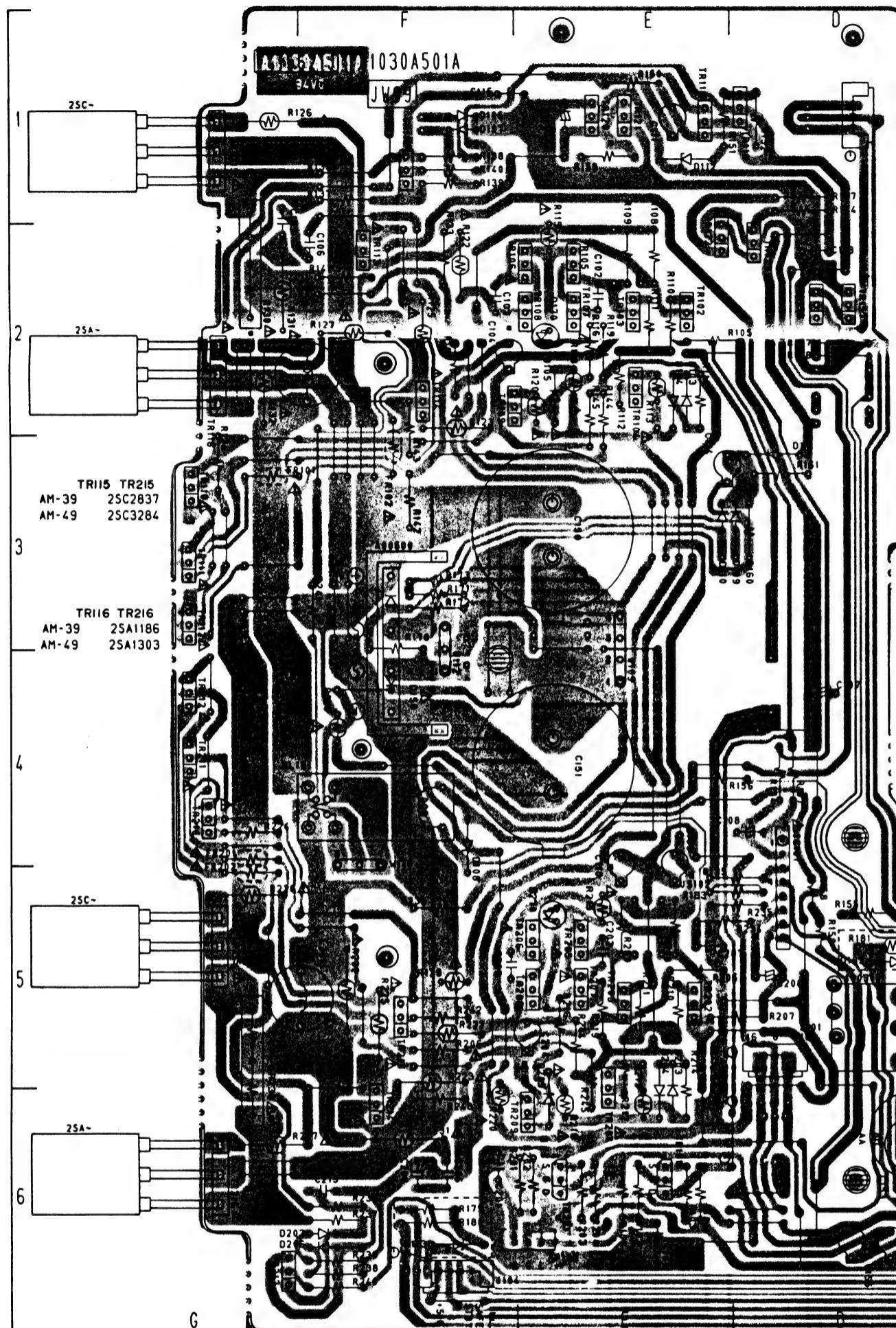
— B (POWER SUPPLY) LINE

— L-CH AUDIO SIGNAL LINE









#### PRINCIPAL PARTS LOCATION

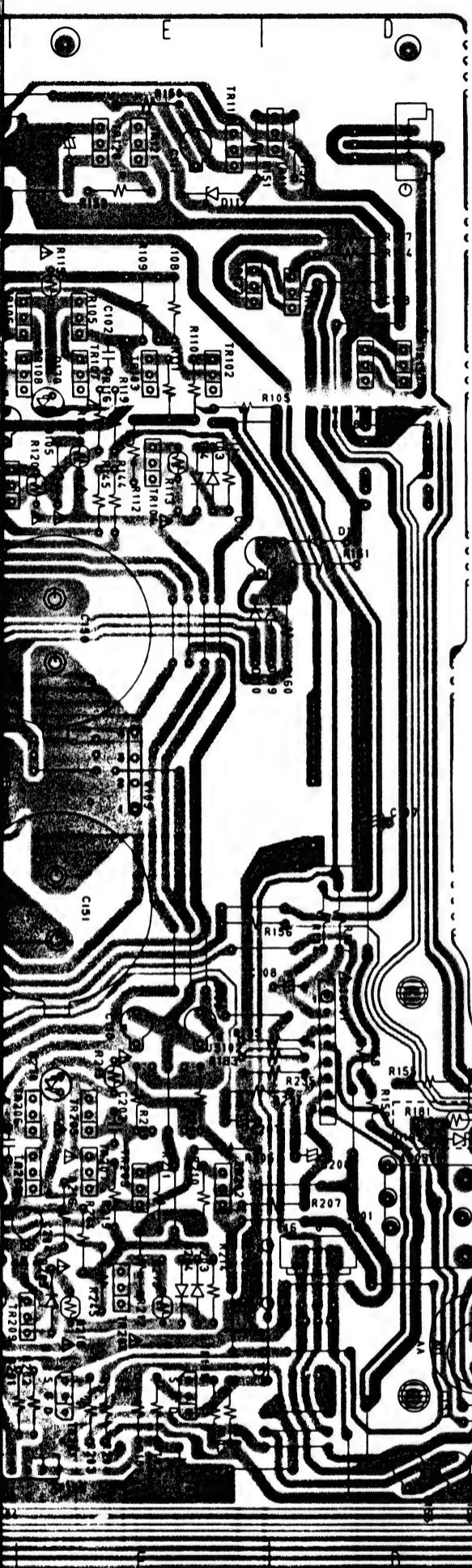
<b>CONNECTORs</b>	
J101 .....	D5
J104 .....	F6
J105 .....	A6
J106 .....	D1
<b>WIREs</b>	
W109 .....	E3,4
W110 .....	F4,5
W111 .....	B5
W112 .....	F3,4
W113 .....	A5
W114 .....	A5
<b>FUSE RESISTORs</b>	
FR101 .....	G3
FR102 .....	F3
FR201 .....	G4
FR202 .....	G5
<b>IC</b>	
IC101 .....	D4,5
<b>TRANSISTORs</b>	
TR101 .....	E6
TR102 .....	E2
TR103 .....	E2
TR104 .....	E2
TR105 .....	E2
TR106 .....	E2
TR107 .....	E2
TR108 .....	E2
TR109 .....	E2
TR110 .....	G3
TR111 .....	G3
TR112 .....	G3
TR113 .....	F2

WARNING: INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.  
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S  
RECOMMENDED PARTS

AVERTISSEMENT: INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.  
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,  
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

MAIN AMP PCB A1030A501A

NOTE : PARTS DIFFER DEPENDING ON  
REFER TO SCHEMATIC DIAGRAM  
PARTS INFORMATION.

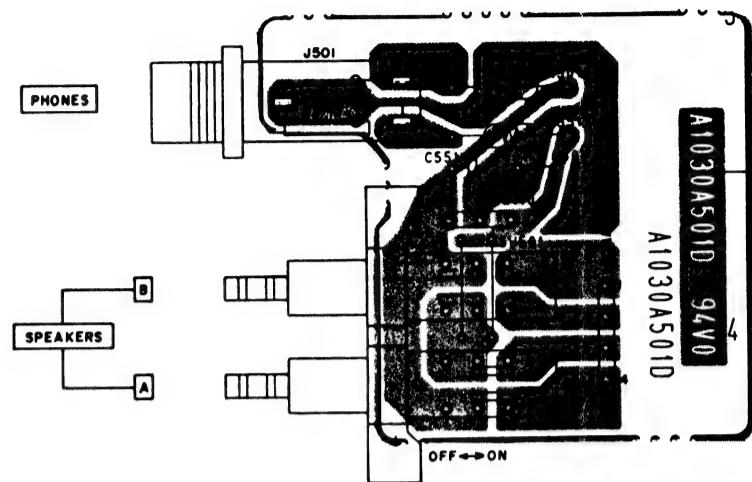


#### PRINCIPAL PARTS LOCATION

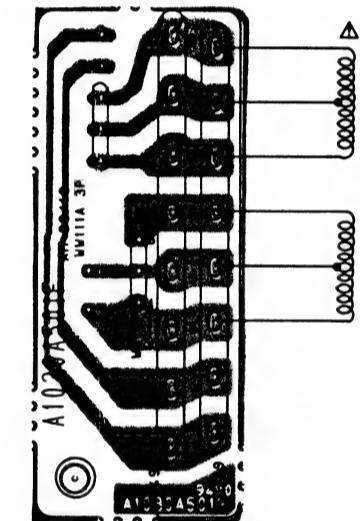
<b>CONNECTORs</b>	
J101 .....	D5
J104 .....	F6
J105 .....	A6
J106 .....	D1
<b>WIREs</b>	
W109 .....	E3,4
W110 .....	F4,5
W111 .....	B5
W112 .....	F3,4
W113 .....	A5
W114 .....	A5
<b>FUSE RESISTORs</b>	
FR101 .....	G3
FR102 .....	F3
FR201 .....	G4
FR202 .....	G5
<b>IC</b>	
IC101 .....	D4,5
<b>TRANSISTORs</b>	
TR101 .....	E6
TR102 .....	E2
TR103 .....	E2
TR104 .....	E2
TR105 .....	E2
TR106 .....	E2
TR107 .....	E2
TR108 .....	E2
TR109 .....	E2
TR110 .....	G3
TR111 .....	G3
TR112 .....	G3
TR113 .....	F2
TR114 .....	F2
TR115 .....	G1
TR116 .....	G2
TR117 .....	F1
TR118 .....	E1
TR119 .....	D1
TR120 .....	E1
TR121 .....	E1
TR122 .....	E2
TR123 .....	D2
TR150 .....	C,D5
TR151 .....	D5
TR152 .....	C6
TR153 .....	C6
TR154 .....	B6
TR155 .....	B6
TR156 .....	D2
TR157 .....	D2
TR158 .....	B6
TR201 .....	E6
TR202 .....	E5
TR203 .....	E5
TR204 .....	E5,6
TR205 .....	E5
TR206 .....	E5
TR207 .....	E5
TR208 .....	E5
TR209 .....	E6
TR210 .....	G4
TR211 .....	G4
TR212 .....	G4
TR213 .....	F5
TR214 .....	F6
TR215 .....	G5
TR216 .....	G6
TR217 .....	G6

WARNING: INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.  
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S  
RECOMMENDED PARTS

AVERTISSEMENT: INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.  
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,  
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT



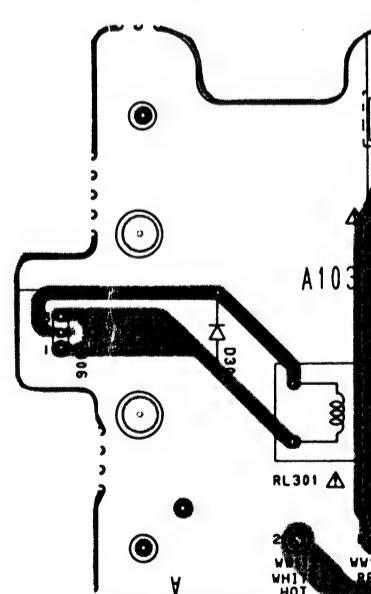
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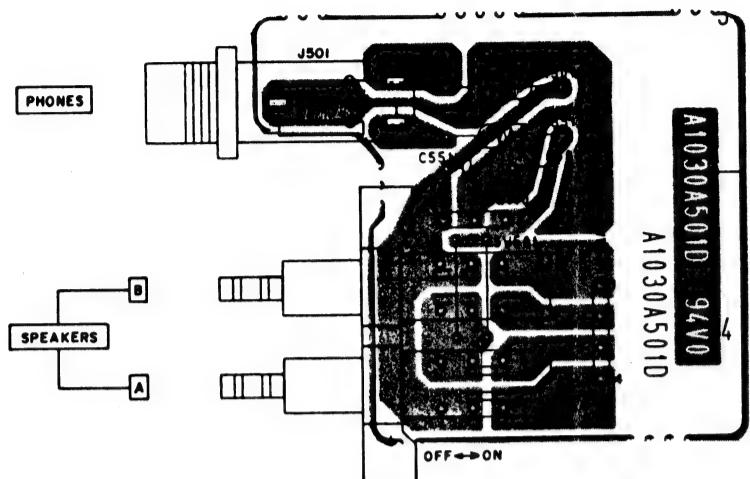


RELAY(B) PCB  
A1030A501F

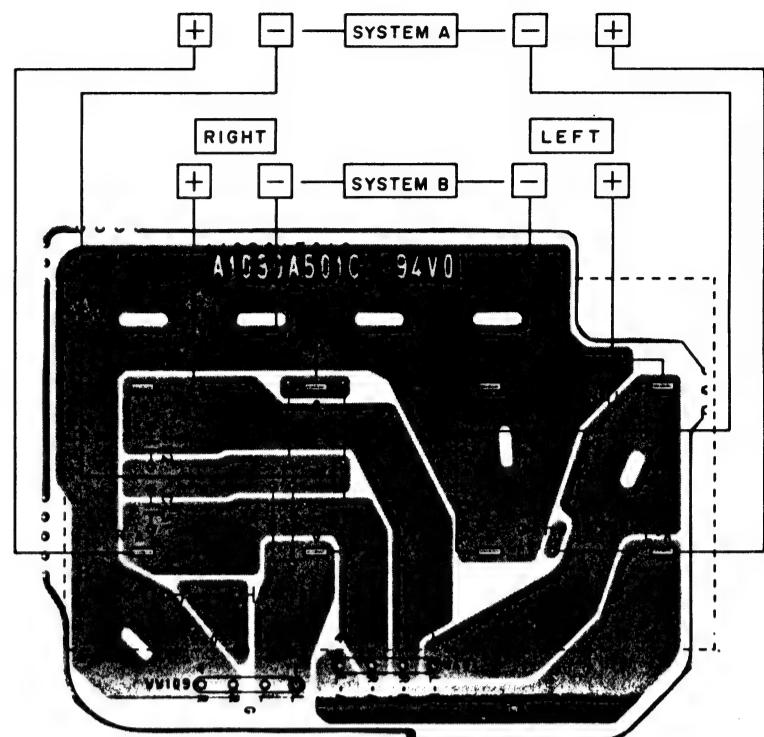
MAIN AMP PCB A1030A501A

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.  
REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT  
PARTS INFORMATION.

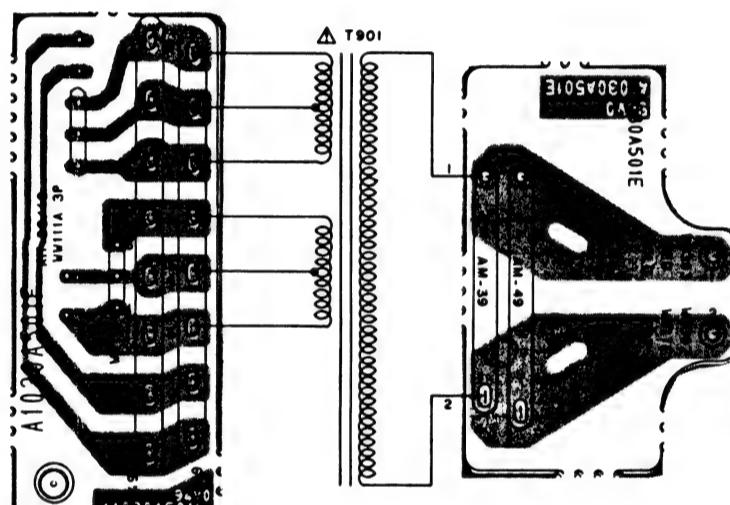




PHONES PCB A1030A501D

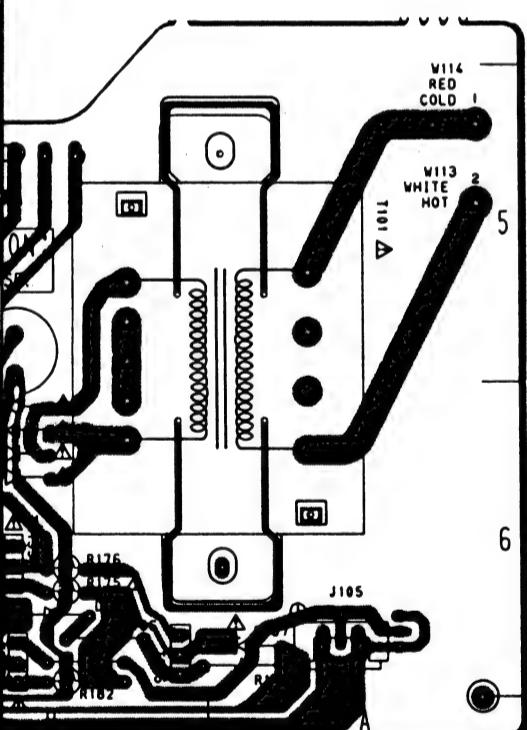


SP TERMINAL PCB A1030A501C

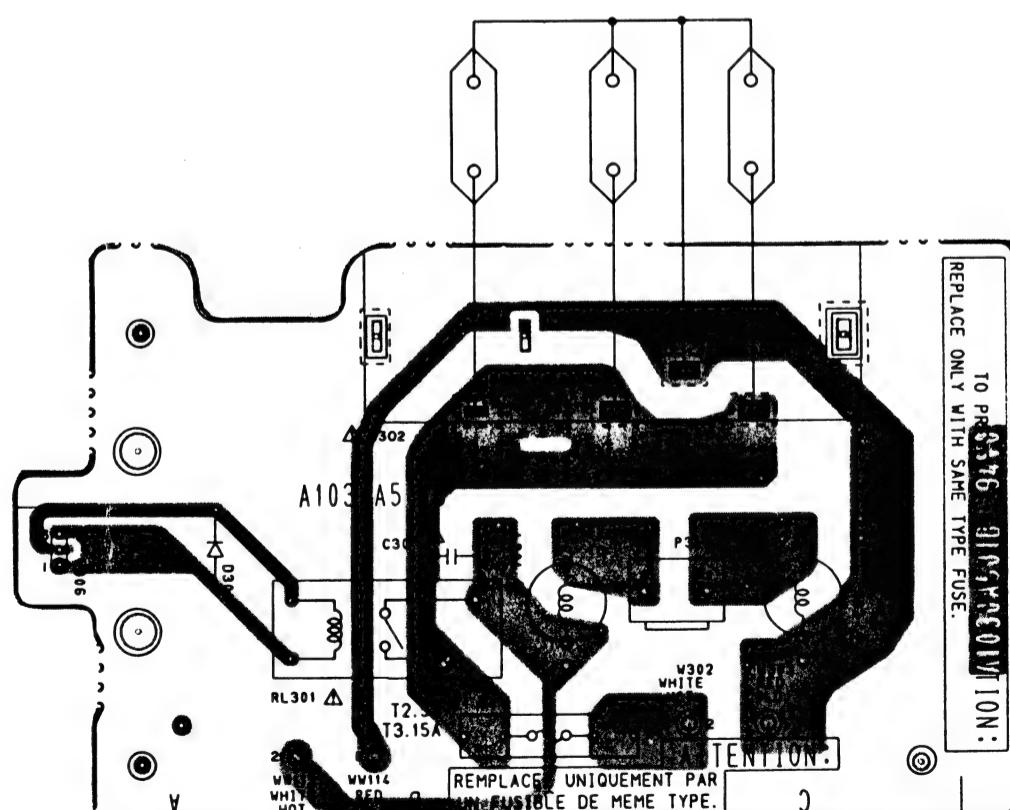


RELAY(B) PCB  
A1030A501F

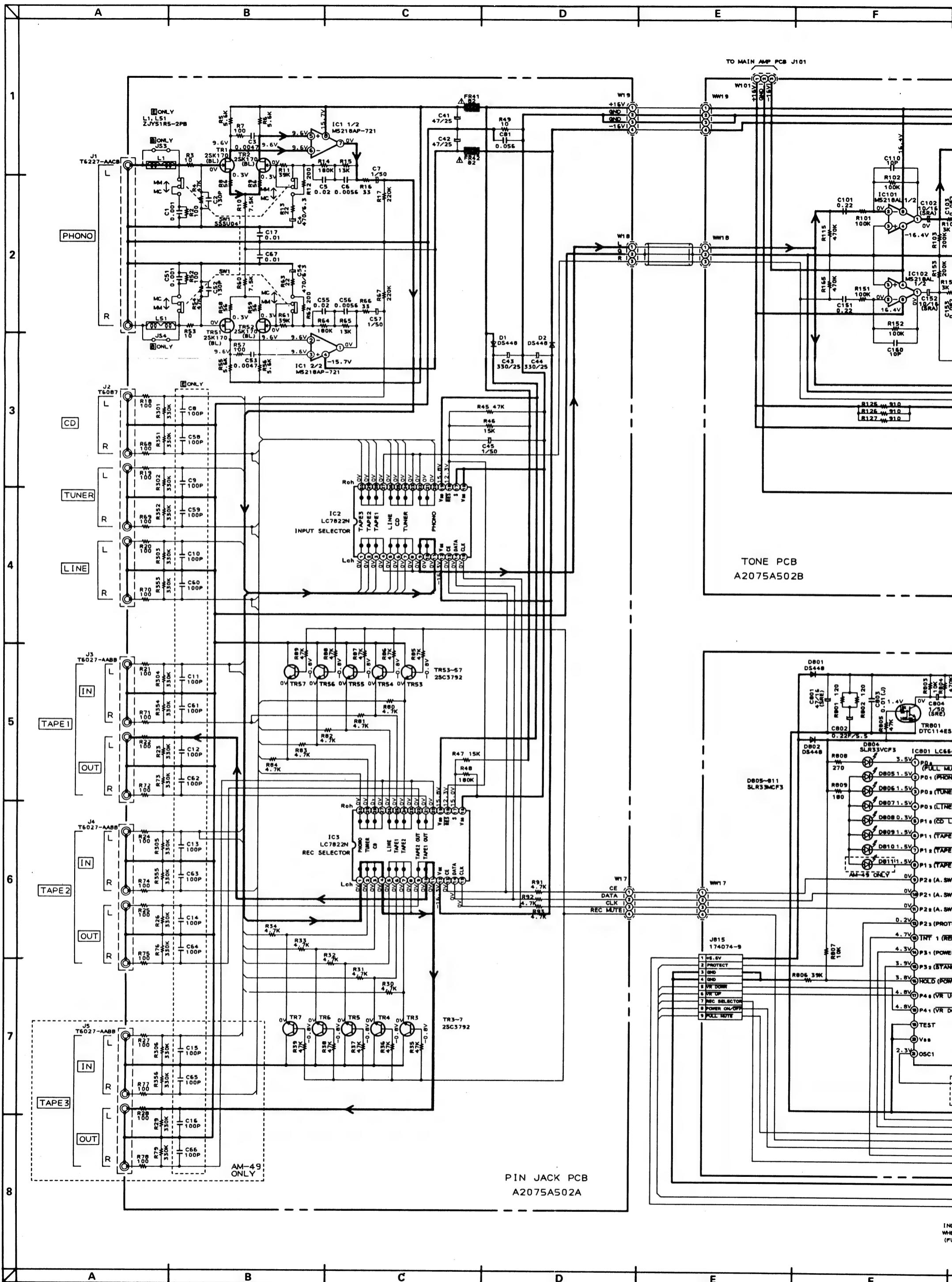
RELAY(A) PCB  
A1030A501E

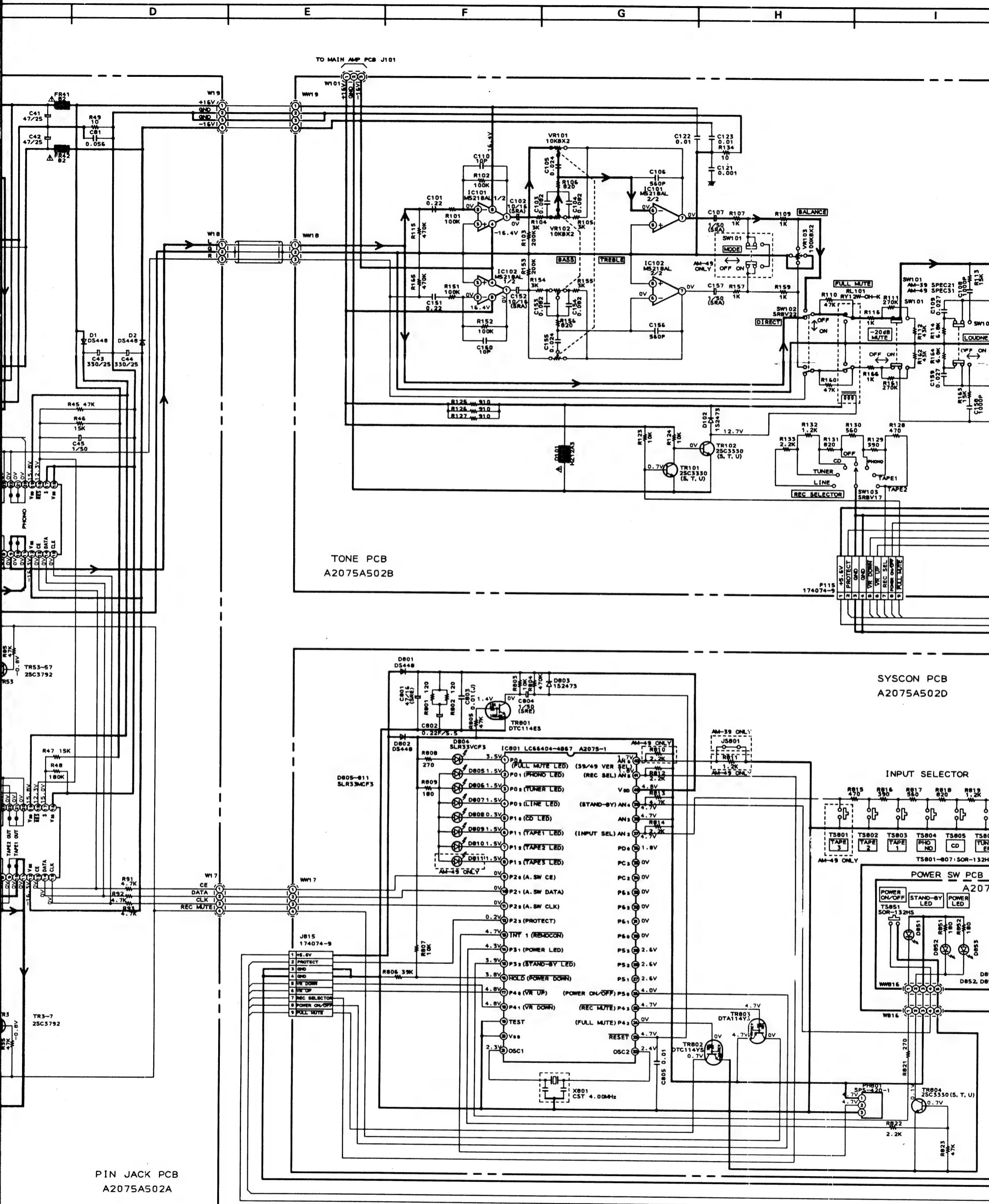


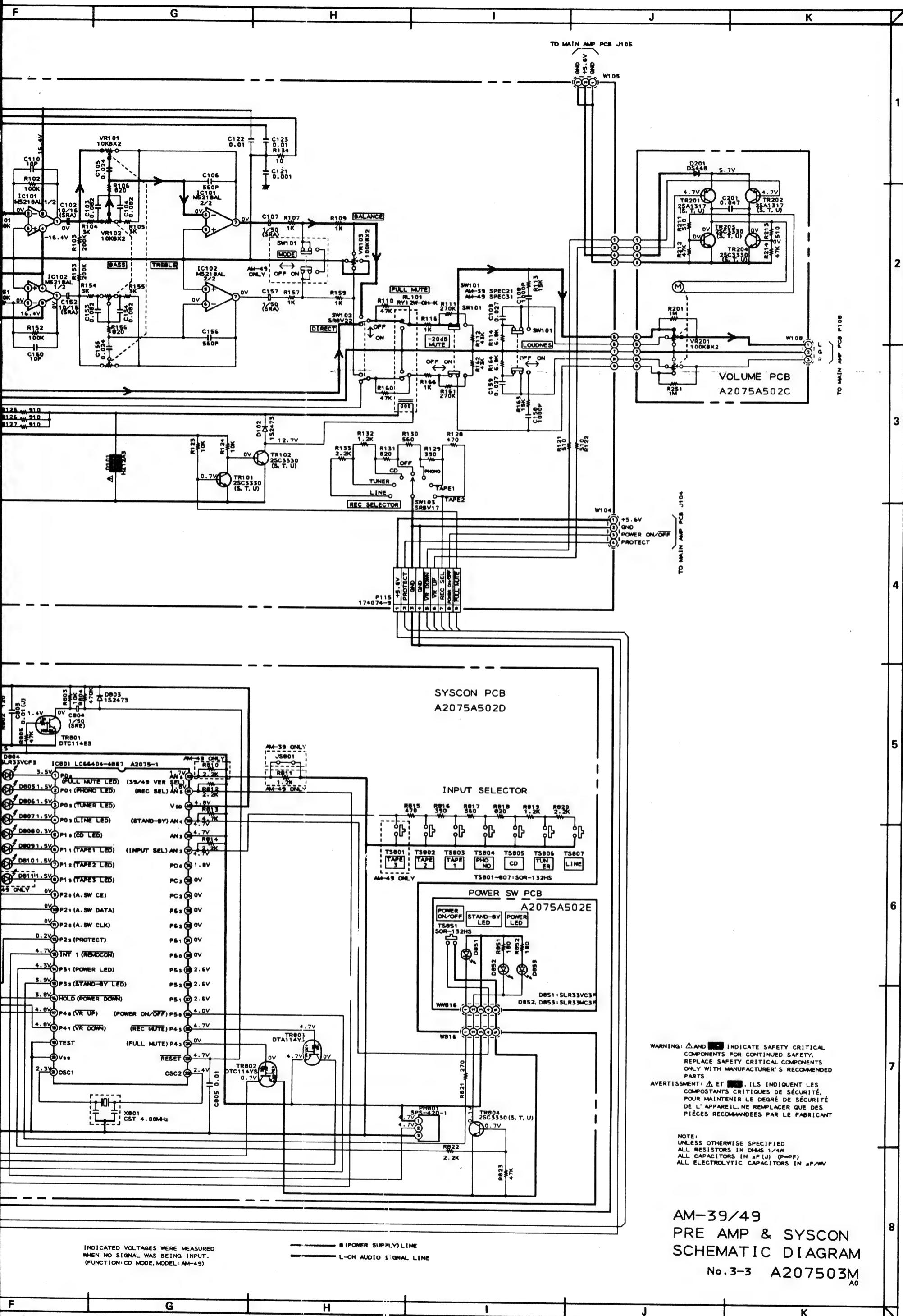
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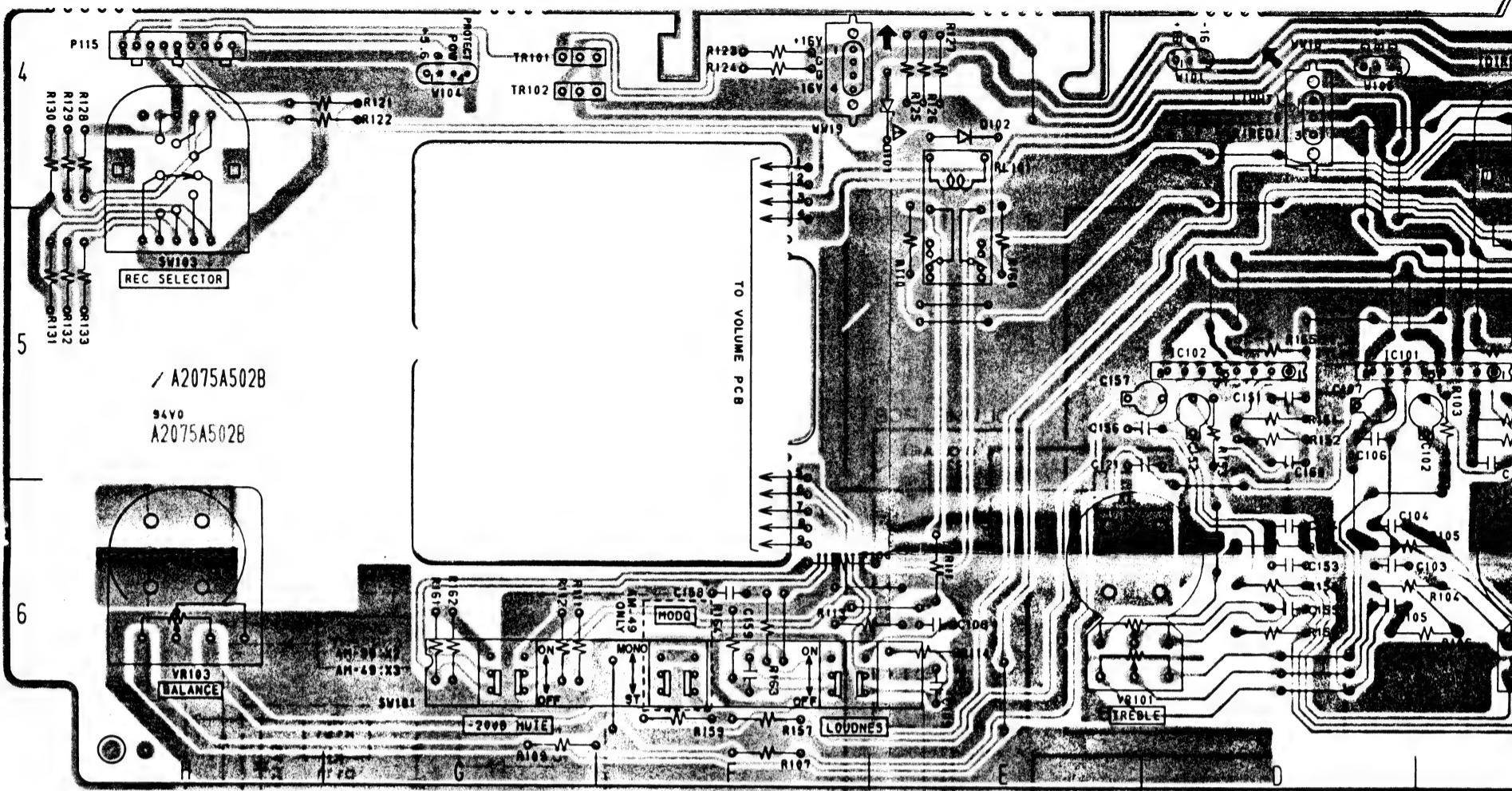


PRIMARY PCB A1030A501B

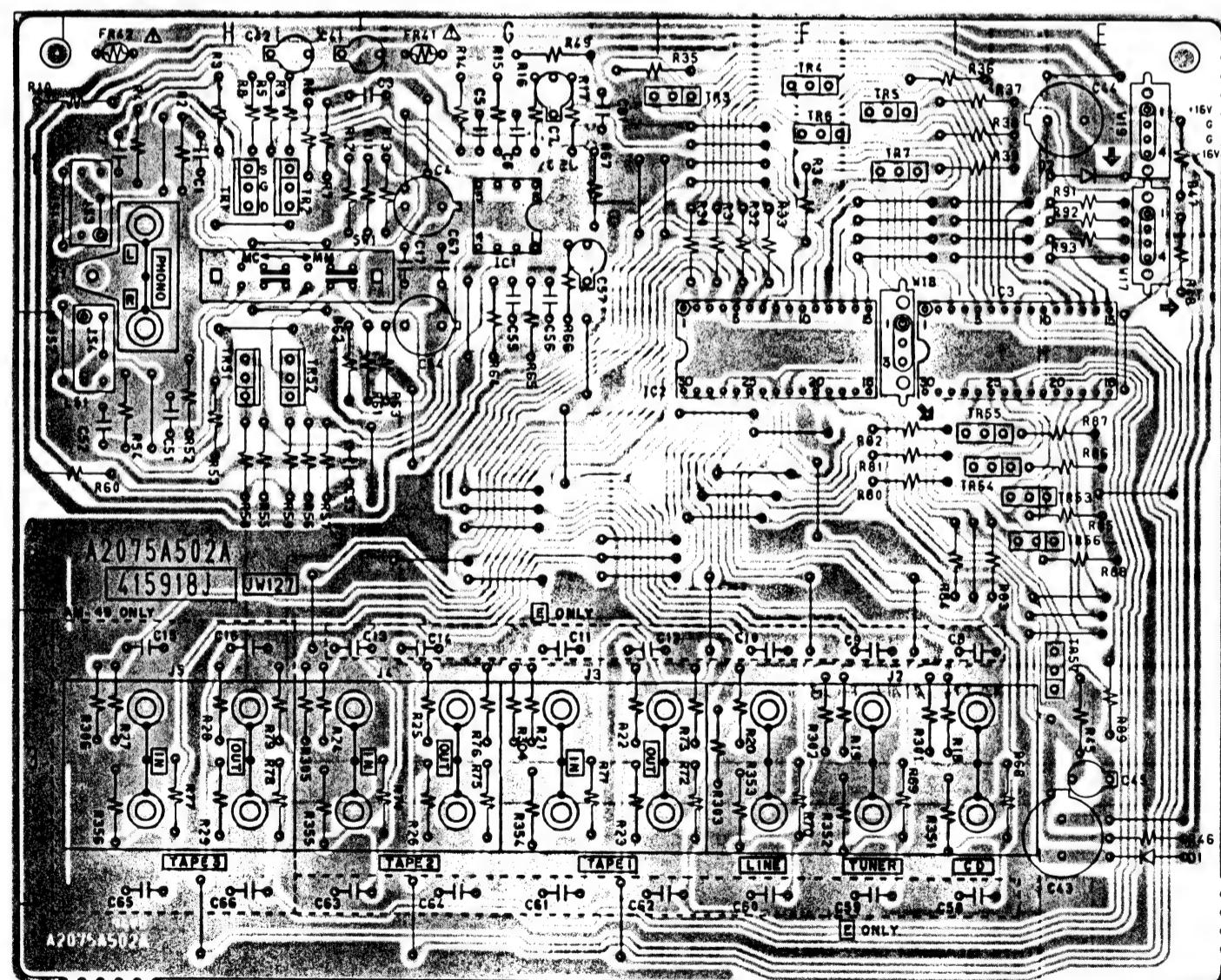








TONE PCB A2075A502B



PIN JACK PCB A2075A502A

**PRINCIPAL PARTS LOCATION**  
**CONNECTORS**

J1	H1
J2	E,F3
J3	F,G3
J4	G,H3
J5	H3

**WIRES**

W17	E1
W18	F2
W19	E1

**FUSE RESISTORS**

FR41	G1
FR42	H1

**ICs**

IC1	G1
IC2	F2
IC3	E2

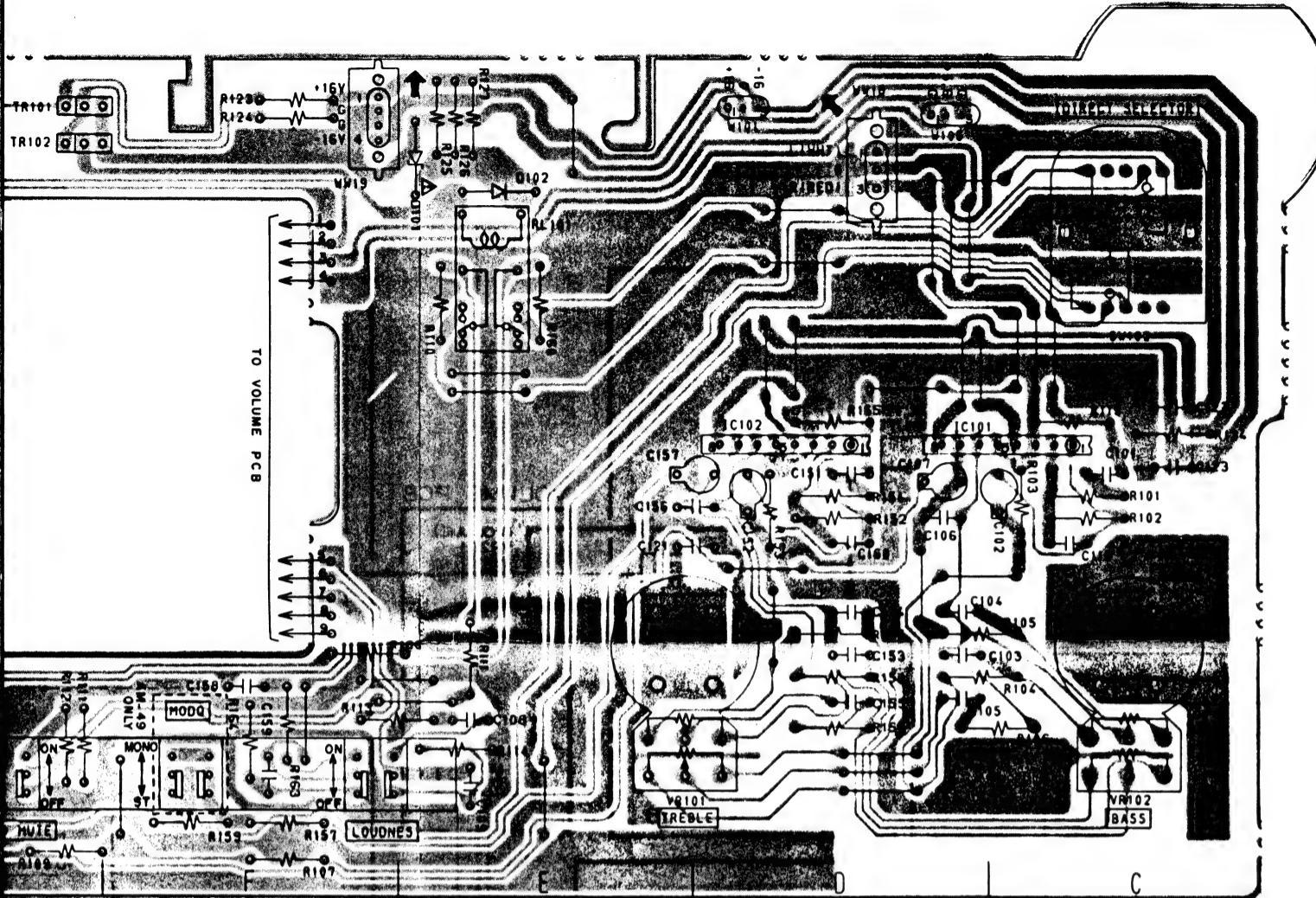
**TRANSISTORS**

TR1	H1
TR2	H1
TR3	F,G1
TR4	F1
TR5	F1
TR6	F1
TR7	F1
TR51	H2
TR52	H2
TR53	E2
TR54	E2
TR55	E2
TR56	E2
TR57	E3

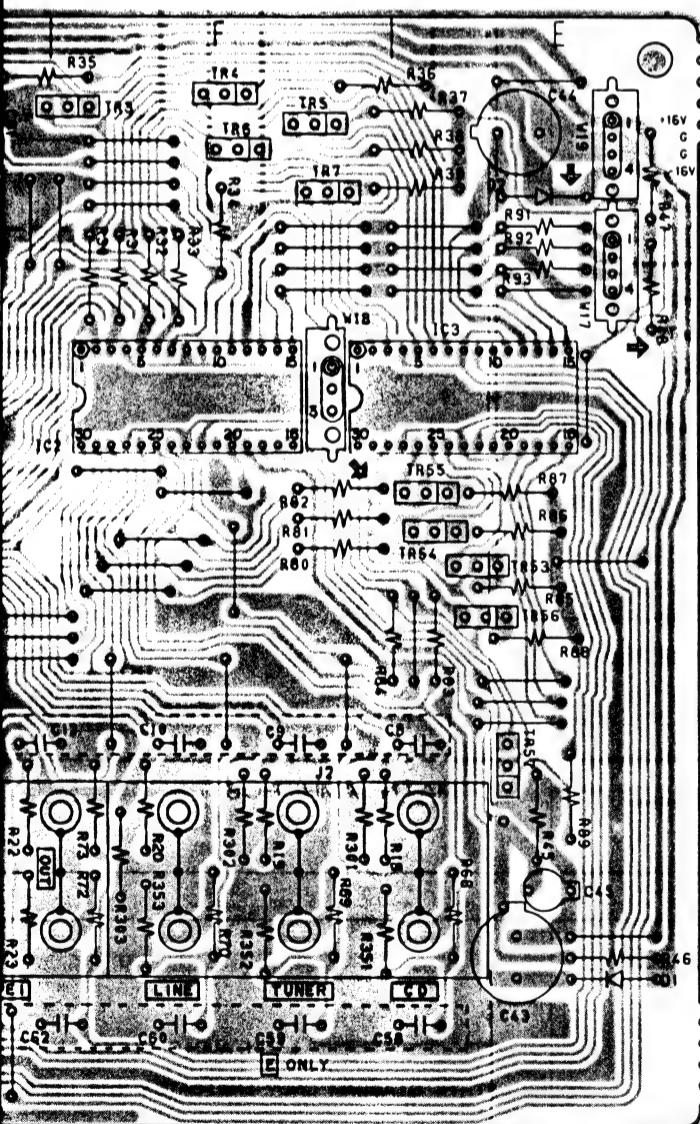
NOTE : PARTS DIFFER DEPENDING ON MODEL  
REFER TO SCHEMATIC DIAGRAMS FOR PARTS INFORMATION.

WARNING:  $\Delta$ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTROL  
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MA  
RECOMMENDED PARTS

AVERTISSEMENT:  $\Delta$ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ  
POUR MAINTENIR LE DÉGRÉ DE SÉCURITÉ DE L'APPAREIL  
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LA



TONE PCB A2075A502B



## **PRINCIPAL PARTS LOCATION**

## **CONNECTORs**

- |          |      |
|----------|------|
| J1 ..... | H1   |
| J2 ..... | E,F3 |
| J3 ..... | F,G3 |
| J4 ..... | G,H3 |
| J5 ..... | H3   |

WIREs

- W17 ..... E1  
W18 ..... F2  
W19 ..... E1

FUS

- FR41 ..... G1  
FR42 ..... H1

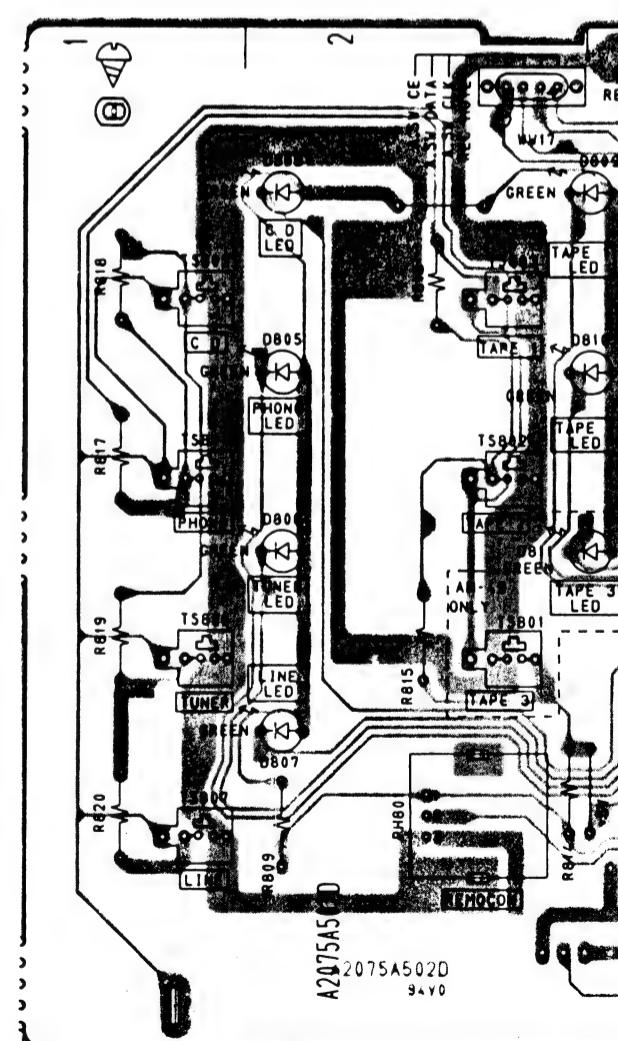
IC3 .....

- | <b>TRANSISTORS</b> |      |
|--------------------|------|
| TR1                | H1   |
| TR2                | H1   |
| TR3                | F,G1 |
| TR4                | F1   |
| TR5                | F1   |
| TR6                | F1   |
| TR7                | F1   |
| TR51               | H2   |
| TR52               | H2   |
| TR53               | E2   |
| TR54               | E2   |
| TR55               | E2   |
| TR56               | E2   |
| TR57               | E2   |

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.  
REFER TO SCHEMATIC DIAGRAMS FOR PERTINENT  
PARTS INFORMATION.

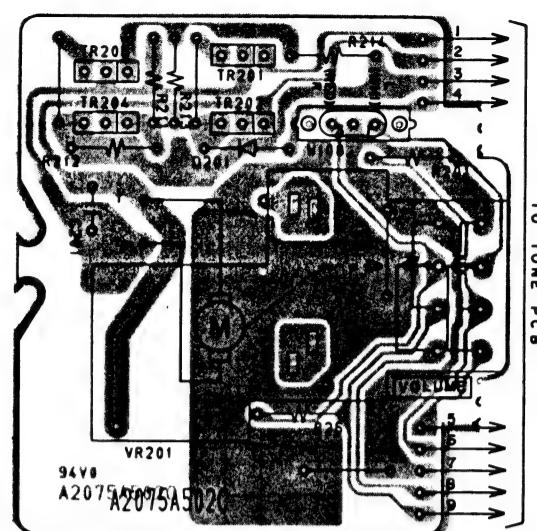
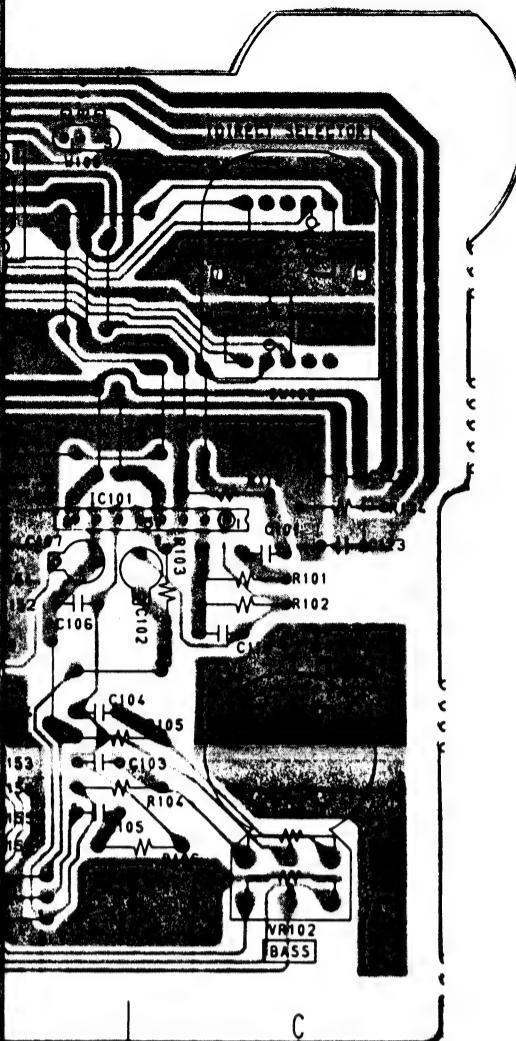
**WARNING:  INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.**

**RECOMMENDED PARTS**  
**AVERTISSEMENT: ΔIL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.**  
**POUR MAINTENIR LE DÉGRÉ DE SÉCURITÉ DE L'APPAREIL,**  
**NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT**

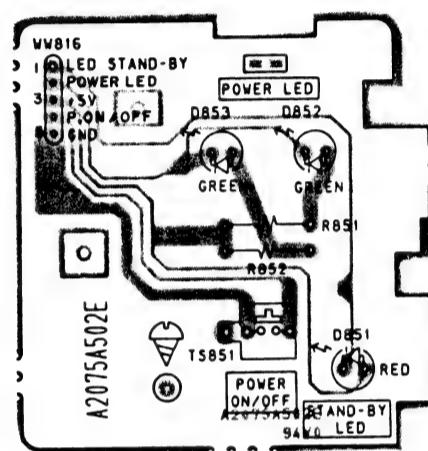


CB A2075A502A

SYSCON PCB A207

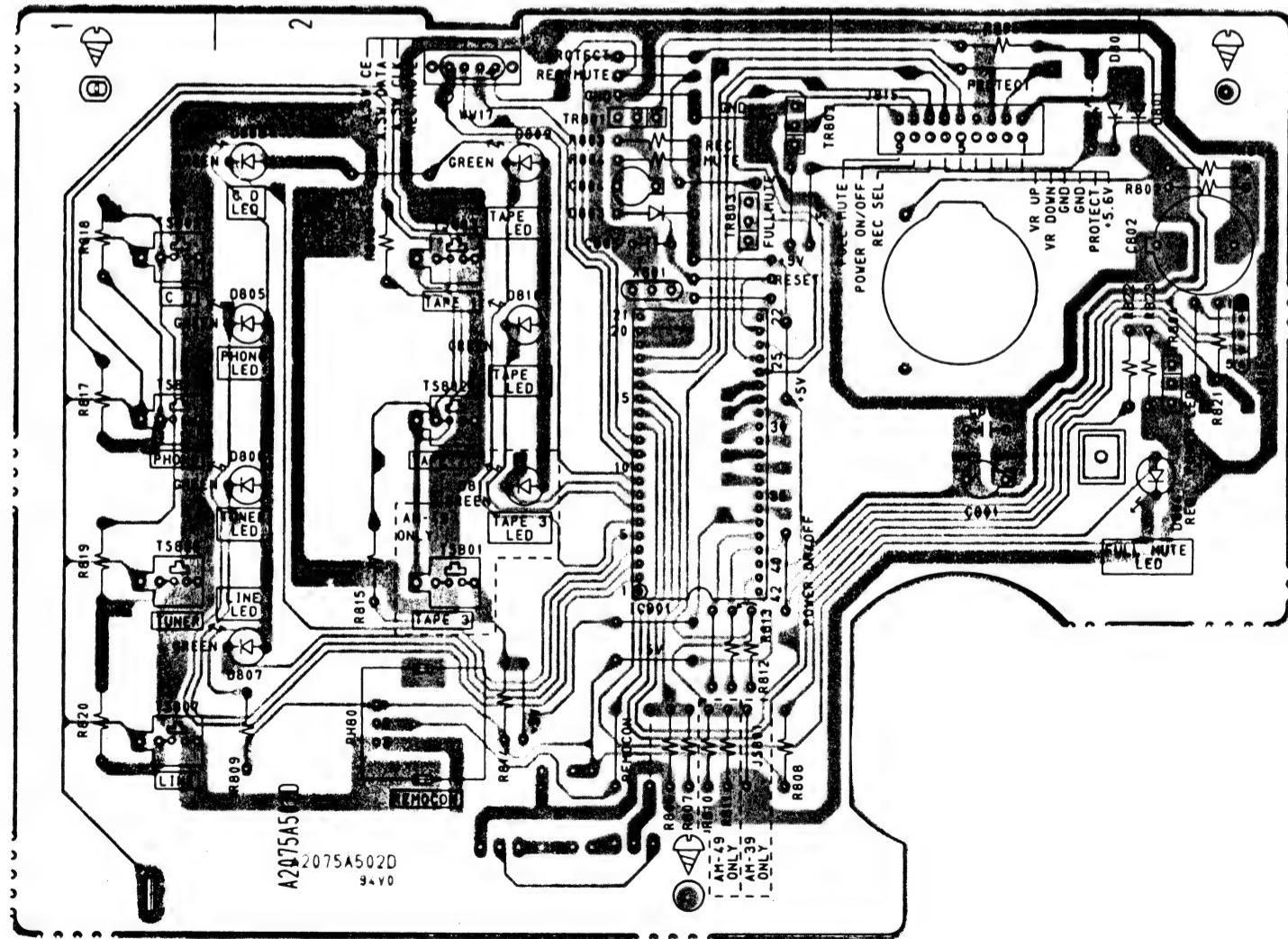


VOLUME PCB A2075A502C



POWER SW PCB A2075A502E

S LOCATION

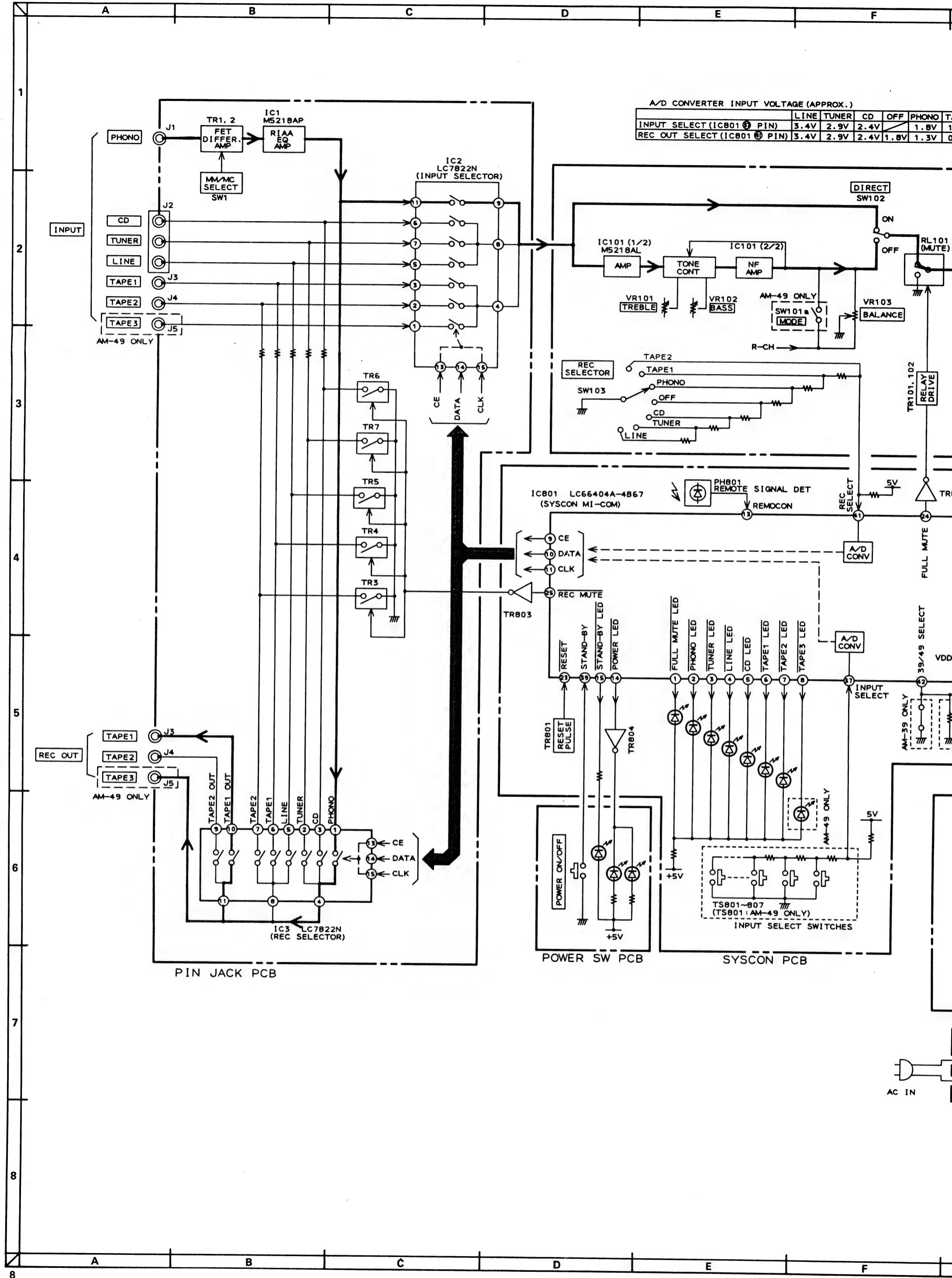


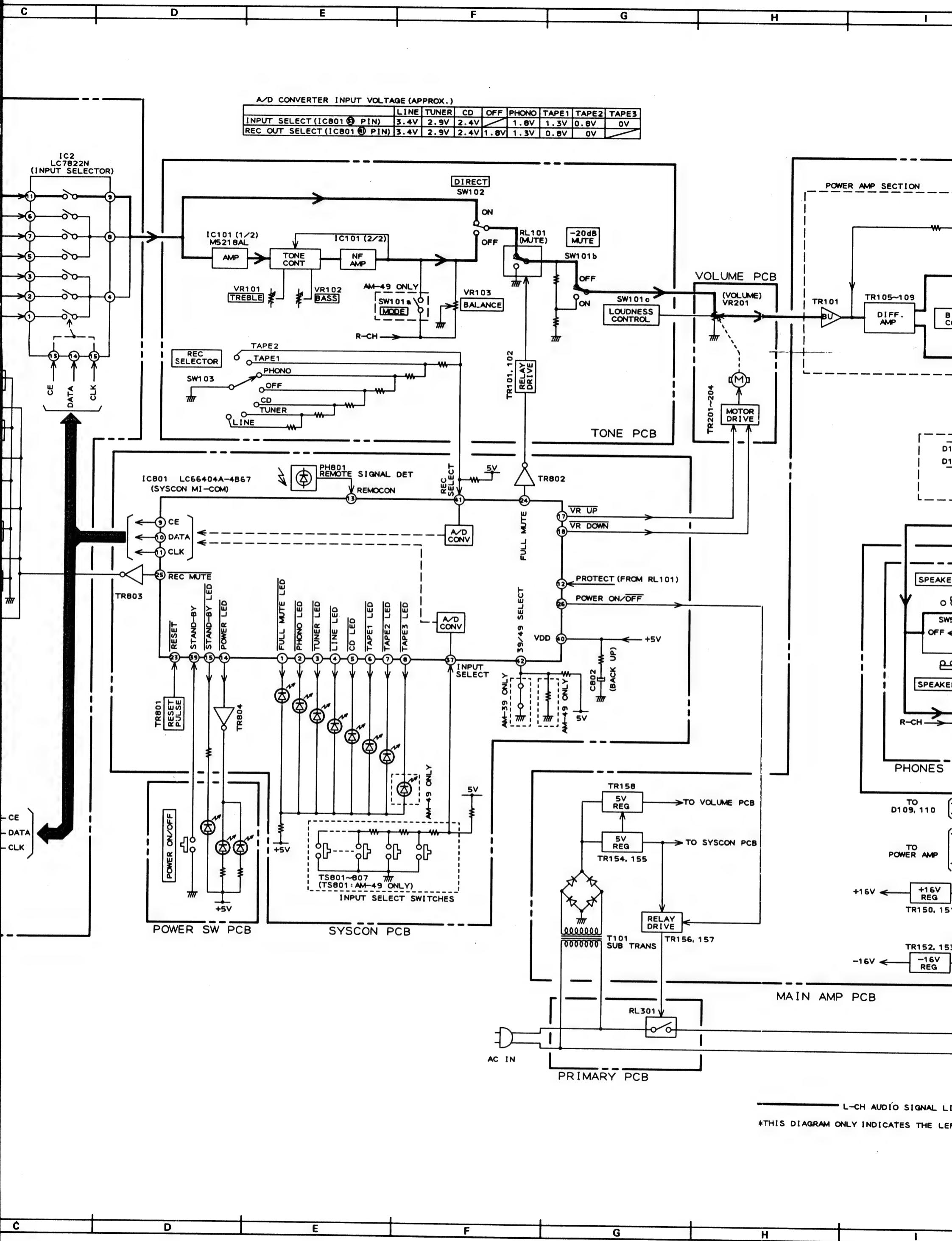
SYSCON PCB A2075A502D

DEPENDING ON MODEL NUMBER,  
MATIC DIAGRAMS FOR PERTINENT  
TION.

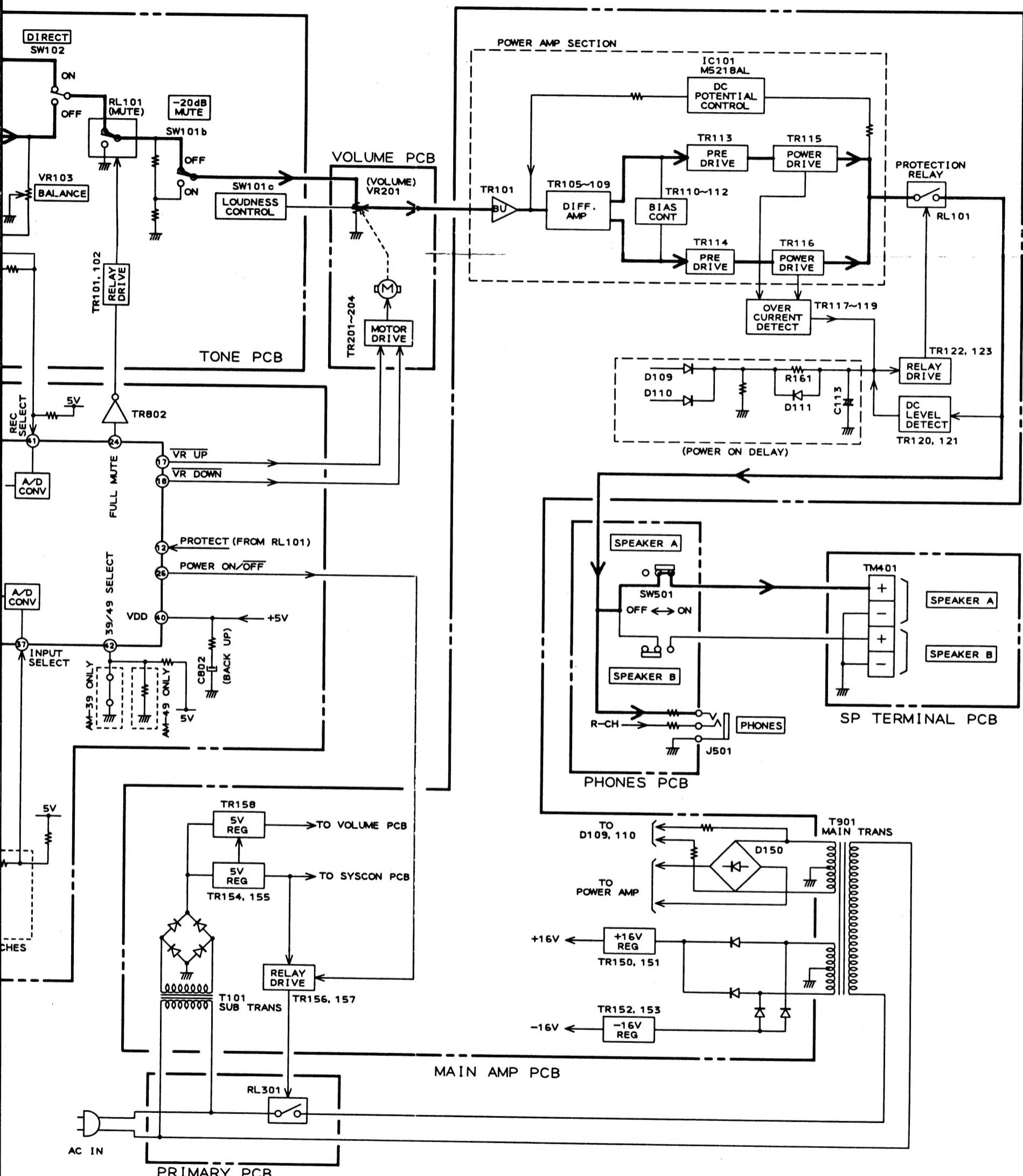
TICAL COMPONENTS FOR CONTINUED SAFETY,  
AL COMPONENTS ONLY WITH MANUFACTURER'S

COMPONENTS CRITIQUES DE SÉCURITÉ.  
RE DE SÉCURITÉ DE L'APPAREIL,  
PIÈCES RECOMMANDÉES PAR LE FABRICANT





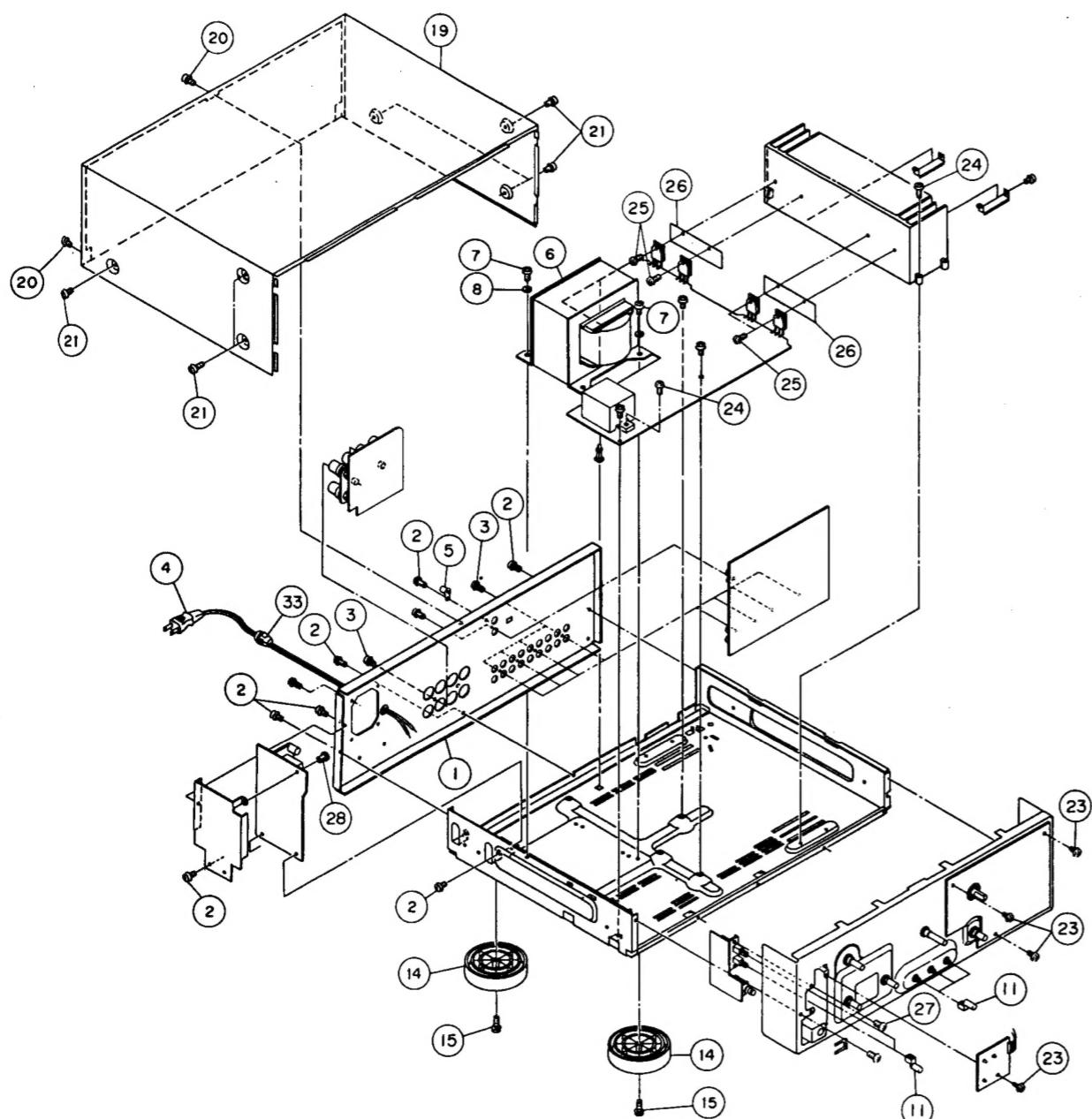
D.X.)		CD	OFF	PHONO	TAPE1	TAPE2	TAPE3
9V	2.4V			1.8V	1.3V	0.8V	0V
9V	2.4V			1.8V	1.3V	0.8V	0V



L-CH AUDIO SIGNAL LINE  
\*THIS DIAGRAM ONLY INDICATES THE LEFT CHANNEL.

AM-39/49  
BLOCK DIAGRAM  
No. A207551M  
A1

### FINAL ASSEMBLY BLOCK



### 12. FINAL ASSEMBLY BLOCK

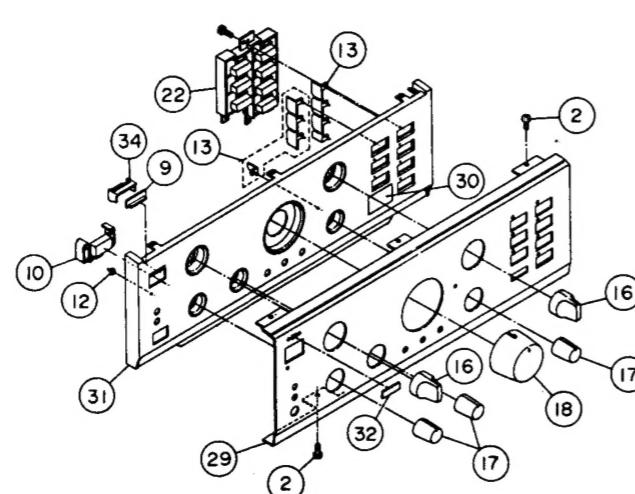
Ref. No.	Part No.	Description
1-A	SP-415354M	PANEL REAR AM-39 (E) (SG)
1-B	SP-415358M	PANEL REAR AM-39 (B) (SG)
1-C	SP-415359M	PANEL REAR AM-49 (E) (SG)
1-D	SP-415362M	PANEL REAR AM-49 (B) (SG)
2	ZS-393644J	ST BID30X08STL BZN PROJECT
3	ZS-394412J	BT BID30X08STL BZN PROJECTION
4-A	*EW-408724M	AC CORD200 SE1H03VVH2F VHR3N E
4-B	*EW-415021M	AC CORD 200 SE-5VCTFK VHR3NB
5	EJ-329610	TERMINAL W/SCREW UB-0067 L 1P
6-A	*BT-415110M	TRANS POW A2075-EV [AM-39][T901]
6-B	*BT-415111M	TRANS POW A2075-BS [AM-39][T901]
6-C	*BT-415112M	TRANS POW A2076-EV [AM-49][T901]
6-D	*BT-415114M	TRANS POW A2076-BS [AM-49][T901]
7	ZS-346742	ST BID40X08STL CMT CUP
8	ZW-410640J	SW40STL CMT
9	SE-373237J1	LENS POW
10	SB-415182M	BUTTON POWER (SG)
11	SK-402898J	BUTTON PUSH-B
12	SE-410963M	LENS LED (SG)
13	SE-415346M	LENS SELECTOR (SG)
14	SA-379375	FOOT (N)
15	ZS-336714	ST BID30X12STL CMT
16	SK-415178M	KNOB SELECTOR (SG)
17	SK-415180M	KNOB TONE (SG)
18	SK-415349J	KNOB VOLUME PART
19	SP-391360J1	COVER UPPER B
20	ZS-393644J	ST BID30X08STL BZN PROJECT
21	ZS-404225J	ST BID40X08STL BZN
22	SB-415345J	BUTTON SELECTOR
23	ZS-394414J	BT BID30X08STL BZN
24	ZS-336714	ST BID30X12STL CMT
25	ZS-395789J	BT BID30X16STL BZN
26	EZ-401261J	INSULATOR TBM-F FB-20
27	ZS-358936	ST BID30X06STL CMT
28	ZW-698308	RV NYL30X055 BL
29-A	SP-415343J	PANEL FRONT AM-39
29-B	SP-415355J	PANEL FRONT AM-49
30	SE-415347M	FILTER REMOCON (SG)
31	SE-415344M	ESCUOTHEON FRONT (SG)
32	SM-365756C	NAME PLATE AKAI (2)
33	EZ-371605	BUSH CORD 2271
34	SE-373256	CASE LED

### NOTE:

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

### 13. ACCESSORY

Ref. No.	Part No.	Description
1-A	AX-415040M	REMOCON RC-S49 [AM-39]
1-B	AX-415115M	REMOCON RC-S59 [AM-49]



## INDEX

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
AX415040M	13-1-A	ED511907	3-D162	ER411836J	3-R132	ET378524J	3-TR152
AX415115M	13-1-B	ED511907	3-D163	ER411836J	3-R232	ET378524J	3-TR157
BAA1030T020F	2-1-A	ED511907	3-D164	ES415046J	10-TS801	ET378524J	3-TR210
BAA1030T020G	2-1-B	ED624903	3-D108	ES415046J	10-TS802	ET378524J	3-TR211
BAA1030T020H	2-1-C	ED624903	3-D111	ES415046J	10-TS803	ET394735J	7-TR3
BAA1030T020J	2-1-D	ED624903	4-D301	ES415046J	10-TS804	ET394735J	7-TR4
BAA2075T030A	2-2-A	ED624903	8-D102	ES415046J	10-TS805	ET394735J	7-TR5
BAA2075T030B	2-2-B	ED624903	10-D803	ES415046J	10-TS806	ET394735J	7-TR6
BAA2075T030C	2-2-C	EF415060J	3-F2	ES415046J	10-TS807	ET394735J	7-TR7
BAA2075T030D	2-2-D	EF415060J	3-F3	ES415046J	11-TS851	ET394735J	7-TR53
BT415037M	3-T101-A	EF415061J	4-F1-A	ES415087J	6-SW501	ET394735J	7-TR54
BT415038M	3-T101-B	EF415062J	4-F1-B	ES415099J	8-SW102	ET394735J	7-TR55
BT415110M	12-6-A	EI382875J	10-X801	ES415119J	8-SW101-A	ET394735J	7-TR56
BT415111M	12-6-B	EI393323J	3-IC101	ES415120J	8-SW101-B	ET394735J	7-TR57
BT415112M	12-6-C	EI393323J	8-IC101	ES415123J	7-SW1	ET397160J	3-TR118
BT415114M	12-6-D	EI393323J	8-IC102	ES415126J	8-SW103	ET397160J	3-TR120
EC338496	4-C301	EI393326J	7-IC1	ET305463	3-TR105-A	ET397160J	3-TR121
EC364978	3-C159	EI403530J	7-IC2	ET305463	3-TR106-A	ET397160J	3-TR122
EC368118	10-C802	EI403530J	7-IC3	ET305463	3-TR107-A	ET397160J	3-TR123
EC373373	3-C150-B	EI416800J	10-IC801	ET305463	3-TR108-A	ET397160J	3-TR156
EC373373	3-C151-B	EJ329610	12-5	ET305463	3-TR117	ET397160J	8-TR101
EC390066J	3-C150-A	EJ342935	5-TM401	ET305463	3-TR205-A	ET397160J	8-TR102
EC390066J	3-C151-A	EJ368244	7-J2	ET305463	3-TR206-A	ET397160J	9-TR203
ED301911	3-D103	EJ382362J	7-J3	ET305463	3-TR207-A	ET397160J	9-TR204
ED301911	3-D104	EJ382362J	7-J4	ET305463	3-TR208-A	ET397160J	10-TR804
ED301911	3-D105	EJ382362J	7-J5	ET305463	3-TR217	ET403432J	10-PH801
ED301911	3-D155	EJ384270J	7-J1	ET307195	3-TR102	ET415051J	3-TR116-A
ED301911	3-D156	EJ391132J	6-J501	ET307195	3-TR103	ET415051J	3-TR216-A
ED301911	3-D157	EJ415050J	4-J302	ET307195	3-TR104	ET415052J	3-TR116-B
ED301911	3-D158	EO403613J	3-L101	ET307195	3-TR109-A	ET415052J	3-TR216-B
ED301911	3-D165	EO403613J	3-L201	ET307195	3-TR202	ET415053J	3-TR115-A
ED301911	3-D166	EO403613J	4-L301	ET307195	3-TR203	ET415053J	3-TR215-A
ED301911	3-D203	EO403613J	4-L302	ET307195	3-TR204	ET415056J	3-TR115-B
ED301911	3-D204	EQ400957J	8-RL101	ET307195	3-TR209-A	ET415056J	3-TR215-B
ED301911	3-D205	EQ403529J	3-RL101	ET322353	3-TR101	EV401270J	8-VR101
ED301911	7-D1	EQ415055J	4-RL301	ET322353	3-TR201	EV401270J	8-VR102
ED301911	7-D2	ER324480	3-R128	ET345625	3-TR113	EV403534J	8-VR103
ED301911	9-D201	ER324480	3-R129	ET345625	3-TR155	EV415032M	9-VR201
ED301911	10-D801	ER328069	3-R175	ET345625	3-TR158	EW408724M	12-4-A
ED301911	10-D802	ER328069	3-R182	ET345625	3-TR213	EW415021M	12-4-B
ED307572	3-D106	ER333108	6-R501	ET345626	3-TR114	EZ371605	12-33
ED307572	3-D107	ER333108	6-R551	ET345626	3-TR153	EZ401261J	12-26
ED307572	3-D109	ER333119	3-R131	ET345626	3-TR214	SA379375	12-14
ED307572	3-D110	ER333119	3-R231	ET352726	3-TR112	SB415182M	12-10
ED307572	3-D206	ER341493	3-FR101	ET352726	3-TR150	SB415345J	12-22
ED307572	3-D207	ER341493	3-FR102	ET352726	3-TR154	SE373237J	12-9
ED319176	8-D101	ER341493	3-FR201	ET352726	3-TR212	SE373256	12-34
ED330219	3-D112	ER341493	3-FR202	ET353897	10-TR801	SE410963M	12-12
ED343421	3-D159	ER344161	7-FR41	ET353899	3-TR119	SE415344M	12-31
ED343421	3-D160	ER344161	7-FR42	ET353899	9-TR201	SE415346M	12-13
ED346529	3-D167	ER368226	3-R130	ET353899	9-TR202	SE415347M	12-30
ED383034J	3-D170	ER368226	3-R230	ET354365	10-TR802	SK402898J	12-11
ED383034J	3-D270	ER368284	3-R125	ET360749	7-TR1	SK415178M	12-16
ED384278J	3-D150	ER368284	3-R225	ET360749	7-TR2	SK415180M	12-17
ED400680J	10-D805	ER378514J	3-R122	ET360749	7-TR51	SK415349J	12-18
ED400680J	10-D806	ER378514J	3-R123	ET360749	7-TR52	SM365756C	12-32
ED400680J	10-D807	ER378514J	3-R222	ET368047	3-TR109-B	SP391360J	12-19
ED400680J	10-D808	ER378514J	3-R223	ET368047	3-TR209-B	SP415343J	12-29-A
ED400680J	10-D809	ER378833J	3-R166	ET368048	3-TR105-B	SP415354M	12-1-A
ED400680J	10-D810	ER378833J	3-R169	ET368048	3-TR106-B	SP415355J	12-29-B
ED400680J	10-D811	ER382613J	3-R115	ET368048	3-TR107-B	SP415358M	12-1-B
ED403436J	10-D804	ER382613J	3-R118	ET368048	3-TR108-B	SP415359M	12-1-C
ED403987J	11-D852	ER382613J	3-R120	ET368048	3-TR205-B	SP415362M	12-1-D
ED403987J	11-D853	ER382613J	3-R215	ET368048	3-TR206-B	ZS336714	12-15
ED415085J	11-D851	ER382613J	3-R218	ET368048	3-TR207-B	ZS336714	12-24
ED511907	3-D151	ER382613J	3-R220	ET368048	3-TR208-B	ZS346742	12-7
ED511907	3-D152	ER383007J	3-R126	ET369248	10-TR803	ZS358936	12-27
ED511907	3-D153	ER383007J	3-R127	ET376880	3-TR151	ZS393644J	12-2
ED511907	3-D154	ER383007J	3-R226	ET378524J	3-TR110	ZS393644J	12-20
ED511907	3-D161	ER383007J	3-R227	ET378524J	3-TR111	ZS394412J	12-3

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ZS394414J	12-23						
ZS395789J	12-25						
ZS404225J	12-21						
ZW410640J	12-8						
ZW698308	12-28						

## **ABBREVIATIONS (AMPLIFIER)**

ABBREVIATION	EXPLANATION
A	Analog
AC	Alternating Current
AMP	AMPlifier
CD	Compact Disc
COM	COMMON
D	Digital
D/A	Digital to Analog
DAC	Digital to Analog Converter
DAT	Digital Audio Tape recorder
DC	Direct Current
GND	Ground
L	Left
LED	Light Emitting Diode
MC	Moving Coil
MM	Moving Magnet
PCB	Printed Circuit Board
R	Right
REG	REGulator
REC	RECORD
TR	TRansistor
SW	SWitch
V.AMP	Voltage AMPlifier
V.DISC	Video DISC
VR	Variable Resistance
VTR	Video Tape Recorder